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Organisational culture and privatisation. A case study of the Argentinean railway sector

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*Organisational Culture
and Privatisation*

*A Case Study of the
Argentinean Railway Sector*

Ricardo Recht

Organisational Culture and Privatisation

A Case Study of the Argentinean Railway Sector

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Proefschrift

ter verkrijging van de graad van doctor
aan de Katholieke Universiteit Brabant,
op gezag van de rector magnificus, Prof.
dr. F.A. van der Duyn Schouten, in het
openbaar te verdedigen ten overstaan van
een door het college voor promoties
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om 14:15 uur door

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geboren op 29 maart 1961 te Buenos Aires, Argentinië

Promotores: Prof. dr. N. G. Noorderhaven

Prof. dr. S. W. Douma

“... and as I told you,
before privatisation there were
far more sleepers at headquarters
than beneath the rails.”

middle manager, TBA

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1. Introduction

1.1 Initial remarks

Around 1985 Ferrocarriles Argentinos, the Argentinean national railway company, counted roughly 100.000 employees, forwarded a yearly average of 22 billion transport units¹, and was loosing approximately \$2 m. each day². A decade later, and after deregulation, the whole system transported twice as much with less than a third of the employees and subsidy.

These accomplishments were a consequence of the introduction of new strategies, production processes and internal policies. To an extent that is difficult to gauge, they have also been a consequence of a turnaround of the attitudes of those employees that kept their jobs and continued to work for the new operators.

This study illustrates this turnaround showing how the organisational culture of Ferrocarriles Argentinos (FA), an Argentinean state-owned-enterprise (SOE), was transformed as a consequence of the company's partitioning and subsequent transfer into private hands. The case provides a good example of how a weak and dysfunctional culture was reoriented towards an emphasis on customers, cost-reduction and efficiency.

The focus on the cultural aspects of such a transformation were deemed worth of closer scrutiny because of a manifest gap in the literature about privatisations. It was noteworthy that while the bulk of the literature on privatisation focused on the strategic, financial or macroeconomical consequences of deregulation, little attention had been given to the "soft" variables involved in those processes. An exception to this trend constituted a handful of management-related publications, particularly those linking privatisations with opportunities for entrepreneurship and intrapreneurship (cf. Kent, 1987; Backmann, 1983). Scientific contributions that analysed the aforementioned processes from a cultural perspective began to appear after the fall of the "Iron curtain" in Central Europe, but even then rather scarcely (cf. Baburoglu and Gocer, 1991; Weiß and Wiest, 1990).

The disregard of this particular aspect is surprising, because since 1980 neoliberal policies were implemented worldwide and during that same time, the concept of organisational culture has been the "hottest topic" (Alvesson and Berg, 1992) within the field of organisational theory. In addition, it is astounding because on the basis of existing material and already conducted research, it was plausible to infer that the change in ownership and market conditions that follow a privatisation would seriously affect the culture and hence the results of any deregulated firm. The change in organisational culture may even be hypothesised to be one of the main mechanisms for improvement after deregulation.

The privatisation of any SOE or agency radically alters the firm's market situation, the legal framework in which it is embedded and, particularly, its financial relationship with the government. As mentioned above, on the basis of the existing knowledge it was possible to assume that cultural changes would take place and to estimate their direction.

And precisely that was the central aim of this study: to measure quantitatively the orientation and magnitude of the cultural shifts that took place after privatisation. In other words, the

main objective was to uncover the shifts taking place in the job-related attitudes, beliefs and values held by those employees that remained within the organisation. Admittedly, these were not too many: only about a fifth of Ferrocarriles Argentinos' original workforce was still working for the new, private companies. The situation in other areas and countries did not differ radically.

These facts notwithstanding, the lessons gained from this study could reap potential benefits of practical as well as academic nature. Among the first one might mention the fact that the study provides an interesting example for the management of ongoing as well as future privatisation processes. The insights gained through this study could also find application within organisations that, though belonging to the private sector, have been heavily regulated and are trying to get rid of the pernicious cultural by-products of this regulation. On the other hand, the lessons presented here shed additional light on the cultural dynamics of turbulent organisational environments and on the "public-private" debate.

Public units that have went through a deregulatory process operate in a new market, see their legal framework radically altered, have to fight for customers and to generate their own resources. Such changes affect the way a company operates and obviously also affect the culture an organisation has. These cultural shifts could be explained, in principle, by the more common frameworks of cultural transformation. Nevertheless, the nature and depth of the changes experienced by any company that faced privatisation and by this SOE in particular raise the question about the appropriateness of such approaches.

Common approaches (and their respective instruments) might be appropriate as a quick diagnostic tool, but ill suited for the longitudinal design needed in this study. Moreover, such approaches have been heavily criticised for their speedy but shallow results and their lack of a verifiable justification of the dimensions employed (cf. Neuberger, 1987: 52). In order to fully grasp the magnitude and direction of the cultural changes taking place, more refined instruments were needed.

In addition, the quantitative approach had to be underpinned and complemented by concepts derived from the scientific debate about the so-called "publicness puzzle" (Bozeman, 1990). Broadly speaking, this debate centres around the differences and similarities between public and private organisations and the consequences they bear on the character and management of the former.

For those who see little or no difference between "public" and "private" organisations (and their cultures), the transformations triggered by deregulation might only imply an incremental shift. For those who see public and private organisations as different phenomena the change is of a more radical nature and requires the use of a more comprehensive approach.

1.2 The "Publicness³ puzzle": Public vs. Private Administration

This obviously brings into the forum the long-standing and more general debate about the differences between public and private administration. Many scholars point out that the main traits of public and private administration are of disparate nature, and that similarities only

occur on ancillary issues. More recent streams of thought emphasise the blurring of both sectors and propose –based on the decreasing distinctiveness– generic (i.e., common) approaches. In short: are private and public administration “fundamentally alike in all unimportant respects”, as Wallace Sayre (Allison, 1983: 72) once concluded? Or are there, as postulated by Bozeman (1985), no significant differences between public and private administration, and hence some organisations governmental, but all organisations –given the increasing degrees of political interference that affects them– basically public?

There are cogent signs of convergence between both types of organisations, particularly in the more developed part of the world. But if private and public administration are the same, as some authors suggest, why are then some societies fighting to get businesses out of the public realm and into private hands? As Rainey (1989: 230) asks: “If we cannot distinguish between some reasonable categorisation of public and private management, why do nations throughout the world struggle with difficult choices between political controls and market-based controls? Could they simply choose either to nationalise everything or to privatise everything, because it would make no real difference?”. Moreover, and taking into account the experiences of those countries that opted for the latter alternative, how can the enormous differences in productivity and efficiency that take place after privatisation be explained?

The aim of this introductory chapter is to point out the factors that determine the specificity of organisations belonging to the public sector. After that we will detect the factors that not only determine the public sector’s specificity but also influence in a direct manner an organisation’s culture. This sub-group of factors have a double function, they define a unit’s degree of publicness and its culture. Hence, if one (or more) of these “dual” factors is removed or its relative weight shifted, changes in the organisational culture can be plausibly expected. And, needless to add, most deregulatory processes at micro level imply the removal of exactly those traits that define a unit’s publicness.

In the quest for these dual factors we will draw heavily from the points of consensus about the public – private differences summarised by Rainey, Backoff and Levine (1976) and updated by Rainey (1989). Following their classification of these points and the respective attributes they will be presented according to their origin: environmental, transactional (i.e., organisation – environment transactions) and organisational.

1.2.1 Environmental factors: market, legal constraints, and political influences

A number of external factors contribute to the degree of publicness of an organisation. Of foremost relevance among these external or environmental factors is the market (respectively its absence). Most public units lack an economic market; many others (as e.g., the SOEs and other hybrids), though operating within a economic market, also rely on appropriations from the central government or oversight bodies. These appropriations are frequently not related to market mechanisms but follow politically or bureaucratically generated policies (e.g., incrementalism). The reduced market exposure results in lower allocation efficiency, and in less incentive to reduce costs, to operate efficiently and to perform effectively.

A second environmental factor that impedes the effective management of a public unit are the myriad of norms, rules and regulations that limit their flexibility. Judicial, legislative and oversight bodies produce directives that public organisations must accept. The observed greater tendency to the proliferation of formal specifications and controls, and the countless sources of such formal influence restrict public managers' autonomy and impede an efficient administration.

Finally, the actions followed by any public organisation are heavily influenced by political considerations. In public units, the search for economic rationality is frequently drowned by the manipulative attempts or direct interventions made by legislators, union representatives or interest groups. As the degree of publicness increases, so does the need to be responsive to such requests by means of negotiation and bargaining. Under such circumstances, economic reasoning is of only secondary relevance. In other words: in order to survive, public units are in greater need to gain the support of their constituencies, a necessity that frequently leads to inefficient behaviours.

1.2.2 Transactional factors:

coerciveness, scope of impact, public scrutiny, public expectations

The factors discussed here reflect the nature of the links that bind a public organisation with its environment and some key entities within the latter. Of foremost relevance among these transactional factors is the monopolistic, or unavoidable (hence "coercive") nature of many government activities. The recent incursion of private operators into wide domains of previously public territory – as the case here under scrutiny – indicates that in most cases the monopolic character of a given market was defined politically. However, in the coercive nature of these "markets" rested the fundamental justification for the constitutional checks and balances and extensive formal control mechanisms (Rainey et al., 1976: 238).

Also politically defined is the wider scope of impact and greater variety of concerns that public organisations have. Beyond its more central mandate for instance, the Argentinean railway company pursued a number of goals dictated by geopolitical ("Civilisation Agent") or educational ("School of the Nation") reasons. A third transactional factor that allows to discriminate between both fields is found in the greater public scrutiny of public officials and their actions. So-called "sunshine" laws force public officials to conduct business in the open. In addition, mechanisms of accountability and oversight make even issues of marginal importance subject to review by outsiders. Reflecting on his experience in both sectors, Blumenthal (1983) described decisional processes within the public sphere as "fishbowl management".

Finally, ownership also distinguishes private from public organisations. The latter belong to everybody, and citizens therefore have rights and expectations they do not have in relation to private enterprises (Wamsley and Zald, 1973). Other scholars perceive that citizens expect more of public administrators with regard to their integrity, fairness, responsiveness and accountability (Caiden, 1971).

1.2.3 Organisational factors:

goals, authority and leadership practices, decision processes, individual traits, incentives and incentive structures

The distinctive traits of goals, roles, authority, structure, incentives, and individual attitudes can be derived to some extent from the above-mentioned environmental and transactional factors. However, the nature of internal processes clearly helps to identify the degree of publicness. Even more important for the purposes of this study is the fact that many internal arrangements have direct consequences for an organisation's culture.

The most frequently cited distinction between private and public organisations refers to their goals. There is wide agreement that the public environment is characterised by greater goal ambiguity, multiplicity and conflict. Goals are frequently defined in broad, even vague terms; as a consequence it is difficult to specify and quantify performance measures. In addition, they are more debatable and value-laden. Public environments are also characterised by greater goal multiplicity and diversity. Finally, there is a greater tendency of goals to be conflicting, to involve more "trade-offs", partly as a consequence of conflicting demands of diverse constituencies and political leaders.

The limited authority of public administrators contrasts with the latitude and flexibility of most private managers. The former have weaker power bases, less decision-making authority, less autonomy and less flexibility due to complex legal and institutional arrangements (e.g., purchasing and procurement systems, civil service personnel systems, etc.). The limited authority is aggravated by high turnover rates – particularly among those functionaries that have been politically appointed. A number of studies point out that higher-level public managers show greater reluctance to delegate and a tendency to establish more levels of review and approval.

Compared to their colleagues in the private sector, public managers and employees perceive greater administrative constraints on the administration of extrinsic incentives such as pay and promotion. As the degree of publicness increases, so does the difficulty with which incentives can be devised that will alter performance. The private sector can use material incentives more effectively, tying performance to financial rewards. In many cases, a close link between pay and performance is not even allowed within the public sector. On the other hand, a number of studies indicate that public personnel has different work-related values, such as a lower valuation of monetary incentives and higher levels of public service motivation (Lawler, 1971). Other authors found that public sector employees often prefer job security, important tasks, or power and recognition over financial rewards (Banfield, 1977). Finally, various scholars detected that public organisations and employees are cautious and non-innovative, and that public units tend to be less efficient in providing services than their private counterparts. These findings can partly be explained by the greater goal ambiguity in the public sector: vague goals are translated into vague performance expectations.

There is, in summary, much evidence indicating that these environmental, transactional and organisational distinctions allow to discriminate between both types of organisations. There is obviously a wide spectrum of units that, though belonging to the public sector, are characterised by low degrees of publicness. This is the case of many "hybrids" (Emmert and

Crow, 1988) such as public-private joint ventures, government-sponsored enterprises, etc. As a matter of fact, many of these units were created as means to cut through the bureaucratic restrictions and constraints faced by those organisations with high degrees of publicness. Such policies have been followed by most countries, developed or not, for the last forty years. Once the agencies pertaining to the central government demonstrated their inability to reach their specific goals, new units were created that were endowed with wider decisional (and, particularly, financial) latitude. In general, they were exempted from burdensome legal restrictions such as, e.g., the aforementioned civil service personnel systems, or the purchasing systems. However, sooner rather than later these newly created units also adopted or were burdened by a web of legal norms and procedures, making a new set of public units with even wider latitude necessary. This process has often been depicted through an onion diagram, in which every new layer represents a new set of units (Felcman and Krieger, 1987: 313).

Leaving aside those hybrids, there are large sectors within the public sector with high degrees of publicness, particularly in countries of the less developed world. Precisely the existence of large areas in which the degrees of publicness are high justify the treatment of Public Administration as a separate field. They also provide the rationale for the development of related disciplines as, e.g., Strategic Public Management (Nutt and Backoff, 1992; Bryson, 1988) or Public Management (Perry and Kraemer, 1983; Golembiewski, 1987).

1.3 The "Publicness puzzle": Public vs. Private Organisational Cultures

Numerous scholars and practitioners have addressed the comparative issue. Their main findings, summarised in the preceding paragraphs, clearly indicate that the significance of the public – private comparison should be taken into consideration, since it explains both the differences and the specific characteristics in a meaningful way. Starting from this premise, it seems of relevance to analyse closer some evidence with regard to the differences between public and private organisational cultures. However, it is necessary to acknowledge that studies about the culture of public units –at least when compared to the amount of research done in this particular field in the private realm– are rather scarce. In addition, some findings are of an impressionistic nature, based more on an author's personal experience than on systematic comparative measurements.

A good starting point to briefly review the cultural traits of public organisations can be found in the book that to a large extent triggered the growth of interest in organisational culture. In "In Search of excellence", Peters and Waterman distilled eight characteristic features of the culture of excelling American corporations⁴. Leaving aside some questions about the meaning and significance of these criteria as guides to organisational action, "it is rather clear" – as mentioned by Metcalfe and Richards (1990: 53) – "that the values underlying the eight criteria are not much in evidence in the traditional civil service culture".

A second book that prompted interest into cultural matters was Deal and Kennedy's "Corporate cultures". In this case, however, concrete references about the cultural identity of public units can be found. In Deal and Kennedy's taxonomy, public organisations are located in the "low risk, slow feedback corner"; as a consequence of the latter two traits, employees

of such units tend to “focus on *how* they do something, not what they do” and “tend to develop a ‘cover your ass’ mentality” (1982: 119). In particular the lack of feedback generates “protectiveness and caution” and the tendency to “carry out procedures as they are written down without asking whether they make sense in the real world” (1982: 119). In such organisations, following these authors, “Rituals centre on work patterns and procedures” (1992: 120).

In a similar vein, Handy (1981) associated public organisations with a “role culture”. Employees embedded in such a culture expect tasks and responsibilities to be clearly demarcated; career and salary to be regularised and determined by explicit rules and regulations. The organisational structures within such an environment follow a hierarchical model. In summary, Handy’s role culture corresponds to the prevalent stereotype of public unit, the bureaucratic machine.

Another description of public cultures has been compiled by Metcalfe and Richards, who assume that—at least during the eighties— governments had “administrative cultures which give a high priority to procedural conformity rather than management cultures which give a high priority to achieving results” (1987: 72). Other examples of such dichotomic pairs cited by these authors are: “a culture of subservience vs. a culture of responsibility; a culture of continuity vs. a culture of innovation; a culture of propriety regardless of costs vs. a culture of cost consciousness; a culture of stability vs. a culture of progressive improvement” (1987: 72).

Though Metcalf and Richards claimed to “indicate the general direction of cultural change now being sought”, much still has to be done. In a more recent benchmark study of best practices in the American service industry, Roth et al. (1997) located public bureaucracies (represented in their sample by local government units) in the “low practice, low performance” quadrant and identified them as “laggards”. In all but one of the 18 best practices and results studied, the public sector still lags behind the private service firms.

As demonstrated by the previous examples, the units pertaining to the public sector and their culture are generally characterised as bureaucratic or normative. Whenever double-entry taxonomies are employed, public organisations are to be found in the quadrant diagonally opposite to the one where the so-called “excelling” companies are located. In summary, and on the basis of a majority of the literature reviewed, more often than not public units seem to epitomise just “negative” organisational traits.

On the basis of these findings, three issues emerge. First, the collected evidence strongly suggests that there is some kind of specific public culture and that this differentiation should not be prematurely dismissed. Secondly, though the public units are characterised as “laggards” or fall into the “minus – minus” quadrant, it should be noted that to follow normative patterns of behaviour should not be considered an error in itself (see e.g., Metcalf and Richards, 1987: 83; Hofstede 1991: 199). Moreover, not to follow bureaucratic guidelines could be even harmful in specific environments as e.g., electrical utilities or production areas within the pharmaceutical industry. Finally, the general consensus about the existence of a specific public culture, as well as its nature, forces to look for the reasons behind the latter. In other words, it is necessary to understand what causes the public units to foster specific

cultural traits – and what it takes to remove or reorient them in as far as they are counterproductive.

1.4 Public Organisational Cultures: Influencing factors

A useful approach to uncover the sources of such traits lies in the analysis of the aforementioned dual factors and the consequences they bear on public organisations (see Table 1-1). This analysis has to be complemented by a review of those other factors that, though defining the public character of an organisation, do not influence its culture. Finally, there are a considerable number of factors that do not define the public or private character of a given unit, but that do influence its culture. Starting with the dual factors, in this section some common assertions about the culture of public units will be analysed in order to evidence the development of bureaucratic or dysfunctional practices.

It has often been observed, for example, that the culture of public units adheres more to procedural conformity than to performance. But how can a performance-oriented culture be induced when goals are vague, when there is no “bottom line” that could serve as a rod to measure success? Precisely these are the conditions confronted by public administrators and managers, conditions that in addition are compounded by the demands of diverse constituencies and the manipulation by relevant stakeholders (Nutt and Backoff, 1992: 44). As a result, goals are both vague and conflicting, and the organisational requirements and priorities difficult to decipher (ibid, 1992: 45). Equally difficult is, as a consequence, the introduction and administration of performance-related incentives and hence the fostering of a performance-oriented culture. To “operate efficiently”, an approach used in public environments as a substitute for the (unavailable) bottom line, may lead to unacceptable decisions. “Efficiency in public libraries” following Nutt and Backoff’s example, “would entice the library management to keep the books shelved, cut hours, and limit services”. The aforementioned goal ambiguity has other pernicious consequences, since it makes performance expectations difficult to specify (Dahl and Lindblom, 1953). As a result, it may be difficult to recognise success, to identify and reward key contributors, or to detect and correct failures (Nutt and Backoff, 1992: 47).

Performance expectations within the public realm are not only vague and conflicting, but also changing. Such changes are frequent given the high turnover rates among managers, a consequence of both the political character of some appointments and periodic electoral shifts. In any case, “expectations are in constant flux, which makes it easy to rationalise inaction”; in addition, the periodic interruption caused by changing upper levels “lead to cautiousness, inflexibility, and low rates of innovation” (Nutt and Backoff, 1992: 47; Rainey et al., 1976: 241).

As evidenced above, the sources of such bureaucratic cultural traits are diverse and tend to mutually reinforce themselves. Much has been written and proclaimed about the alleged disregard of public employees for the customer and his or her needs. However, there are some clear public-private differences which have to be taken into account here. The link between public units and their publics is not always that of a supplier to a customer. Government units

Table 1

Public – Private differences and their organisational consequences

| Factor | Public Sector | Private Sector | Consequences for public organisations |
|-----------------------|---|--|---|
| Environmental factors | | | |
| Market | Absence of economic markets; reliance on government appropriations. | Consumption patterns define market. | Reduced market exposure leads to less incentive to cost reduction, operating efficiency, and effective performance; to a lower allocational efficiency and availability of market indicators; to a weaker reflection of consumer preferences. |
| Legal constraints | Elaborate and intensive normative constraints due to oversight by legislative and executive branch, by agencies and courts. | Autonomy and flexibility limited only by law and internal arrangements. | More constraints on domains of operation and on procedures; less managerial autonomy; proliferation of norms; many external sources of formal control, authority and influence. |
| Political influences | Greater diversity and intensity of external influences on decisions. Greater need for support from constituencies | Political influence indirect, handled as exceptions. | Appropriations or authorisations often dependent on political backing. Less managerial autonomy. |
| Transactional factors | | | |
| Coerciveness | Consumption and financing of activities often mandatory. | Consumption voluntary and payment based on use. | Monopolistic powers exclude market mechanisms (see above). |
| Scope of impact | Broader scope of concern, impact and greater symbolic significance ("public interest" as valid criteria). | Narrow concerns with reduced societal impact. | Difficulty in measuring goals and performance criteria; inefficiencies caused by "trade-offs" against, e.g., social equity, due process, or fairness. |
| Public scrutiny | Greater public scrutiny of public officials and their actions; "fishbowl management". | Can sequester ideas or innovations. | Difficulty in pursuing developmental activities. |
| Public expectations | Citizens act as owners and impose expectations regarding fairness, responsiveness, honesty and accountability. | Ownership vested in stockholders whose interests are interpreted using financial indicators. | Inefficiencies caused by "trade-offs" against, e.g., social equity, due process, or fairness. |

Public – Private differences and their organisational consequences (cont.)

| Factor | Public Sector | Private Sector | Consequences for public organisations |
|-------------------------------------|--|--|---|
| Organisational factors | | | |
| Goals | Greater goal ambiguity, multiplicity, and conflict (goals more vague, value-laden, or debatable; less tangible; in constant flux). Equity dominant concern. | Goals clear and agreed upon; efficiency dominant concern. | Difficulty in measuring goals and performance criteria; inefficiencies caused by "trade-offs" against, e.g., social equity, due process, or fairness. |
| Authority and leadership practices | Elaborate institutional constraints (e.g., civil service personnel, or purchasing and procurement systems); more external political alliances and influence; more frequent turnover of leaders due to elections and political appointments | Less institutional and external constraints; management largely independent of outside influences; lower turnover. | Managers have less decision-making autonomy and flexibility; weaker authority over subordinates and lower levels; managers show greater reluctance to delegate, a tendency to establish more levels of review, and to make greater use of formal regulations to control lower levels. |
| Decision processes | More likely to be subject to interventions by external authorities and interest groups. | Less external involvement. | Deferments; delays; interruptions. |
| Individual traits | Lower valuation of monetary incentives; job security, power and recognition highly valued; higher levels of public service motivation. | Higher valuation of pecuniary incentives. | Lower levels of work satisfaction and organisational commitment. |
| Incentives and incentive structures | Greater constraints on administration of extrinsic incentives (pay, promotion); weak relation between performance and extrinsic rewards. | Ample freedom to devise incentive systems. | Difficulties in devising incentives for effective and efficient performance; low morale. |

Note: adapted and revised from Rainey, Backoff and Levine, 1976; Rainey, 1989; Nutt and Backoff, 1992

deal, among others, with suppliers, inmates, taxpayers and recipients of benefits; closeness (as suggested by Peters and Waterman) may not invariably be a desirable characteristic of these relationships. On the other hand, public units face severe constraints when trying to motivate their workforce. To some extent, these difficulties might be rooted in the particular (national) merit system. They might also stem from the difficulty to link rewards, individual contribution and performance measurement, due in part to the aforementioned conflicting and ill-defined goals. Finally, many scholars (e.g., Banfield, 1977; Lawler, 1971) found that

public sector employees value job security and power or recognition over monetary rewards. Such rewards are difficult to dispense, particularly over time.

Most of the factors listed in Table 1 allow to derive in a similar way the consequences they have on the culture of public units. The relevance of these factors for this study resides in the fact that once the structural conditions have been removed or altered, e.g., through a deregulatory process, equivalent shifts may be expected in the culture of the now "less-public" organisation. Nevertheless, not all of the factors that define the public character of an organisation also influence its culture. The unavoidable character of certain government activities is cited as a basic distinction between public and private organisations: members of a given society neither can avoid to finance these activities nor to consume them, and the state has unique sanctions and the powers to enforce them. A prime factor that allows to define the degree of publicness of an organisation is the degree of coerciveness of its activity. However, it should be noted that the coercive character does not imply the absence of market mechanisms: schooling is coercive, but parents may opt among different public institutions (e.g., through voucher systems). Coerciveness should thus not be equalled with monopolistic powers. Hence, in spite of being a central feature of certain public units, the coercive character of their activities does not necessarily influence their culture.

It goes without saying that the culture of any unit is not exclusively influenced by the factors listed above. There is a large number of other forces that influence the culture of an organisation, but that are unrelated to the degree of publicness. The kind of task, the technology employed, some aspects of national culture, the size of an organisation: all these elements mould the culture of a certain unit, but do not define its public (or private) character. The fact that specific tasks and technologies or a large size lead to bureaucratic cultural practices has frequently been observed. Also common, particularly in the less developed countries, is the tendency of government, its agencies or enterprises to employ outdated and inefficient technologies or to grow out of proportion. In spite of their close association with bureaucratic outgrowth, these culture influencing factors are not (public) sector specific. Public and private providers of public services (e.g., utilities) that use similar technologies may not differ substantially either in their performance or from a cultural point of view (see, e.g., Rainey, 1989: 245; Atkinson and Halverson, 1986). In other words, specific cultural features in these cases cannot be linked to the public nature of the organisation since they are actually dependent on other factors as for example the kind of task involved or the specific technology used.

1.5 Research question, methodology & data

As indicated above, specific elements define both the public character and the culture of any given organisation. As a consequence of its transfer into private management, the relative weight of such "dual" factors diminishes, and alterations in the culture of the privatised organisation can be expected. The central aim of this study was to detect these changes and reveal their underlying dynamics. Moreover, our interest was focused on what specific aspects of the established cultural order were modified, to what an extent, and into what direction.

To trace these shifts a longitudinal research design was employed, enhanced by the survey of a control unit. This research design thus encompassed an ex-ante measurement at the (still)

public enterprise and its comparison with an analogous survey performed roughly a year after its privatisation. In order to be able to detect a profound cultural cleavage, it was necessary to study a case in which the likelihood of dissimilarities between the conditions before and after privatisation was high. A set of stringent criteria regarding property conditions, age, market position, and size of the SOE resulted in the selection of the Argentinean national railway company as study object. Diverse other reasons determined the selection of those two companies (out of the twelve in which the original SOE was partitioned) in which the ex-post measurement was performed.

Data about the cultural reality at each of the companies involved was obtained by means of stimulated as well as non-stimulated research strategies. Concerning the former, over 25 interviews and an equal number of feedback sessions were conducted. In addition, a paper and pencil questionnaire was administered at the three companies, obtaining an average of 170 useful questionnaires per unit. With regard to the latter research strategies, the analysis of documents provided by the companies and external sources was complemented by month-long stays at each unit. Quantitative data was analysed by various procedures at the level of subgroups within each unit as well as between organisations, and enhanced by material gained through qualitative means. The information elaborated forwarded interesting evidence concerning significant shifts in a number of critical issues and underlined the distinctiveness of public and private organisational cultures.

1.6 Summary & overview

In summary, in spite of the convergence between both fields and the significant reduction of the activities in which the state is active, there still are considerable areas characterised by large degrees of publicness. Evidence collected in these areas indicate that the more general public – private distinction is still valid, and that the equivalent cultural distinction could help to better understand the nature of state and government - related organisations. The specificity of public organisational cultures has been evidenced by various studies, of impressionistic as well as scholarly nature. The implicit use among the latter of the so-called “dual” factors strongly suggest to evaluate their development during deregulatory processes. In the following chapters these factors will be traced in order to highlight the transformations suffered by the culture of a former public unit after its conversion into a private company.

Continuing with the purpose of this introductory chapter, the following three chapters will describe the main concepts and the methodology used in this study. After illustrating the swinging attitudes towards public ownership by way of the Argentinean railway policies, chapter 2 describes the aims, perspectives and practical alternatives of any privatisation effort. The third chapter tries to delineate a definition of the “organisational culture” concept and to circumscribe its boundaries vis-à-vis other related fields within (organisational) theory and practice. In its second part, this third chapter elucidates other culture-related concepts of crucial relevance in the process here under scrutiny. On the basis of the accumulated scientific knowledge and practical evidence, chapter 4 starts formulating the postulated hypothesis. In its second part, and closing this first module of theoretical nature, the research design is briefly discussed.

The central part of this study is composed of the next four chapters, each devoted to one of the companies that belonged (or made up, in the case of Ferrocarriles Argentinos) the Argentinean national railway system. After a thorough description of the particular institutional developments, each chapter observes how these developments forged a set of specific cultural practices. Starting in chronological order, chapter 5 offers a detailed account of FA's history and debacle. The following chapter is dedicated to Ferrocarriles Metropolitanos (FeMeSA), an organisation of transient character intended to serve as a bridge between a dissolving FA and the start of the new, deregulated companies. In spite of the ephemeral character of the unit studied, this 6th chapter is of relevance not only because the ex-ante survey was conducted at FeMeSA, but also as a consequence of the fact that profound alterations took place at that time that resulted in a state of cultural anomia. Chapter 7 describes the process of cultural reconstruction of Trenes de Buenos Aires (TBA), the metropolitan passenger operator. The final chapter of this second module centres around the analogous process at Nuevo Central Argentino (NCA), the cargo carrier that served as a control unit.

The previous four chapters to a certain extent display the cultural dynamics of the overall process. This notwithstanding, chapter 9 further elaborates on the observed general trends in the (re-) creation of cultural elements among former FA employees and their new colleagues. Simultaneously each of the previously postulated hypotheses is analysed in order to determine its validity. Finally, chapter 10 summarises the main findings and their implications for the companies involved. In addition, a number of issues of relevance for both scientist and practitioners are discussed. The chapter ends with pointing out a number of research questions that on the basis of the work here presented seem to be worth pursuing.

¹ Transport Unit [TU] is a combined indicator of Passenger – Kilometres and Tonnes – Kilometres.

² All dollar amounts are U.S. dollars, unless otherwise specified. A billion is a thousand million.

³ The definition of "publicness" used here has been adopted from Bozeman (1987: xi) and refers "to the degree to which the organisation is affected by political authority".

⁴ These features are: 1) Managing ambiguity and paradox; 2) a bias for action; 3) closeness to the customer; 4) encouraging autonomy and entrepreneurship; 5) productivity through people; 6) hands-on commitment to product or service; 7) simple form, lean staff; 8) know your business.

2. Privatisation

2.1 Introduction

The debate upon where to draw the line between the public and private sectors of the economy has a long tradition. Little more than 200 years ago Adam Smith propounded the idea that the market system was actually better than the planning and command system at co-ordinating the individual decisions and thus enhancing efficiency. Private property, according to Smith, fosters productivity and efficiency. "In every great monarchy in Europe the sale of the crown lands would produce a very large sum of money, which, if applied to the payment of the public debts, would deliver from mortgage a much greater revenue than any which those lands have ever afforded to the crown... When the crown lands had become private property, they would, in the course of a few years, become well improved and well cultivated" (Smith, 1776: 824).

In certain areas, e.g. the custody of internal and external security, the administration of the judicial system, there seems to exist an agreement between the advocates of both the liberal and the interventionist positions¹. In these areas the private sector is not expected to perform an adequate role and the State is asked to take care of them. On all other areas, on the contrary, disagreement prevails. The engagement of the state in entrepreneurial activities has a long tradition: broadly defined, public enterprises have always existed. However, the bulk of their story is recent (Harberger, 1987: 5).

The construction and exploitation of railway systems were among the first economic activities to move from private into public hands. By the first world war there were significant public sector holdings in this sector in France, Germany, and Italy and, in Latin America, in Brazil and Argentina. There also have been, nevertheless, and from 1850 on, alterations in ownership in the opposite direction, i.e. from public to private administration. To a certain extent, the history of railways in general, and of the Argentinean system in particular, are paradigmatic concerning the aforementioned debate. In the following section, a brief review of the Argentinean railway history will serve as an example of the political arguments and practical needs that induced the changes in ownership.

2.2 Public or private?

Some economic, political and pragmatic arguments

In 1857 the Buenos Aires government (at that time separated from the Argentinean Confederation) allowed the formation of a society that was interested in the construction and exploitation of a railway line. The decree allowed the government to purchase the shares it considered necessary but –following liberal principles– never more than one third of the total emission. By the time the locomotives had to be ordered, the society had not been able to sell all shares, making it ask for a permission to use horses instead of steam. The problem was solved by the purchase of the residual shares (roughly 40 %) by the government. Thus even before its inauguration in 1857, the private enterprise was transformed into a mixed one. Needless to say, similar circumstances have, at other points in time, induced the engagement of the public sector in entrepreneurial activities: the shortness or shyness of above all local capital forced government to broaden its range of activities.

During its first years of operation, the railway incurred substantial deficits. As an example of what later became one of the main sources of growth of the public sector in Latin America as well as in other regions, the government rescued the failing society from bankruptcy. As a consequence, only six years after inauguration, the first railway line completed its shift into public hands.

As noted by many scholars (Cuccorese, 1984; Roccatagliata, 1987), the railway system was developed without the government having previously defined a clear railway policy. Thus the level of public participation oscillated according to the economic perspective and political stance of the power holders. Until 1885, and particularly under the presidencies of Avellaneda and Roca, public and private investment and administration in the sector coexisted.

In August 1886 Juárez Celman assumed the presidency. Two years earlier, Herbert Spencer affirmed the superior validity of the individual rights and voiced his opposition to public intervention (Spencer, 1884). Given the relevance of the railways at that time, his book is full of direct and concrete references to that mean of transport. Juárez Celman and his minister E. Wilde openly declared their admiration for Spencer. They acted accordingly: many public works and railway lines (e.g. Ferrocarril Andino, Ferrocarril Oeste) were transferred to the private sector.

Máximo Paz, governor of the Buenos Aires province, shared Juárez Celman's views. In his Message to the Legislature (January 5, 1889) he declared that the state should not be a transport entrepreneur. As an exception, it intervenes in areas the private sector is not interested in. According to Paz, public railway administration has "hindered progress, has suffocated important advancement initiatives and constituted a constant source of complaints..." (Cuccorese, 1984: 92). In 1890, the provincial lines (roughly a fifth of the whole system) were sold to private investors. As in previous privatisations, the revenues were used to ease the government's financial burden. Similar reasons are currently forcing the sell of SOE's: "... in many developing countries privatisation was a means of dealing with foreign debts (comparable to the budgetary deficits that Western governments face) and to attract new foreign capital." (Van Dijk and Schulte Nordholt, 1994: 8).

The liberal trend slowly ebbed away, giving way to new ideologies and economic perspectives. In 1920, president Irigoyen vetoed the authorisation to form a mixed enterprise that intended to construct a line between Argentina and Chile. His main argument was that the construction had to be administered by a public unit. (Cuccorese, 1984: 113). In 1921, he ordered by decree the construction of that same connection. But having no solid financing, the works were halted and only finished in 1948.

Though initiating at different times and places, the trend towards nationalisation slowly encompassed practically all national railway systems (as well as other sectors). The rationale behind that trend were disparate: Bismarck nationalised the railway system for strategic reasons; in Britain the motive was rather of an ideological nature. In many developing countries, and particularly in former colonies, the arguments often advanced for nationalisation have been of nationalistic or political nature (López, 1991: 5).

The latter two arguments prevailed when Perón, evoking and fostering the resentments among some groups of citizens against foreign capital, nationalised the railway system on March 1st, 1948. According to Perón, the acquisition of the English and French railway lines "constituted the highest realisation of the patriotic strivings aimed at economic recuperation" (Cuccorese, 1984: 150).

As can be observed, the shift between public and private sector has neither been "one-way" nor linear. However, the patterns that led to the nationalisation or the establishment of SOE's in the transport as well as in other sectors, in Argentina and world-wide, were similar. The underlying arguments also remained relatively undebated while the welfare-state ideology remained ingrained in the public mind.

The current wave of privatisations has many, often strongly related sources. At a global level, it has been set off by the examples provided by Thatcher and Reagan. Following her political aims of privatisation and denationalisation, Thatcher disengaged British government from many activities the state had become involved in after the second world war. In the US, though the overall public involvement (and above all the use of SOEs) was substantially lower, the deregulatory policies enacted by Reagan and Bush also set an example for the rest of the world. Additional sources of particular relevance for the developing world have been the loan conditions of the international donor community. Of utmost importance in this respect has been the 1983 World Development Report of the World Bank. This report formulated a conceptual basis for large scale economic change; it examined the role of the government and public sector in general, concluding that a reduction of their power and influence, and the simultaneous reorganisation of SOEs, would stimulate economic efficiency. According to that same report, if privatisation is implemented thoroughly and correctly, private investment would be enhanced and fostered and the government could do a better job in those areas where its activities would be concentrated. Thus the return of the invisible hand redirected the developing strategies of the World Bank and the International Monetary Fund. Further sources of particular relevance for the developing world have been the catastrophic budgetary situation and the rising awareness -particularly after the fall of the iron curtain- that there is not such a thing as a "third way" out of economic poverty.

2.3 Privatisation, deregulation and semantics

Before attempting to identify the main objectives of privatisation and deregulation, it is necessary to analyse the concrete scope of both terms. This seems to be a relevant task since the extensive usage has eroded their specific meaning. To begin with, the emphasis on privatisation found in much of the current literature on the topic is somewhat misleading: to a certain extent, the privatisation concept has substituted that of deregulation, which is the ultimate objective. Privatisation may have "become **the** model to promote economic growth in Third World countries" (Van Dijk and Schulte Nordholt, 1994:7), but it remains a further instrument to reach a deregulated market, which is the real target. The abuse of the privatisation concept has also been noted by the same scholars, when noting that "Various authors consider for example deregulation as privatisation" (1994: 19). However, and paraphrasing their example, it is clear that stimulating competition is not necessarily privatisation.²

The difference between deregulation and privatisation is of extreme relevance for the developing world; there is evidence suggesting that privatisation processes started amidst a highly regulated economical environment do not succeed because of the abundance of currency, wage or price controls. A deregulated market assumes that all obstacles which restricted private initiative have been lifted across all sectors in order to maximise growth opportunities and improve competitiveness. Freedom has to be granted to the currency markets and controls on prices, wages and interest rates restricted or avoided. By the same token, obstacles to and tax discrimination on foreign capital have to be eliminated, and the access to the national market eased.

On the other hand, the term "privatisation" is not concisely circumscribed: Ramanadham (1989) states 15 different meanings, a list that according to van Dijk and Schulte Nordholt (1994) could easily be extended. The term is usually considered to represent the shift in ownership of a SOE or state unit from the public to the private sector. However, even this restricted denotation allows diverse alternatives. A detailed analysis of these and further privatisation alternatives (e.g. contracting out, management contracts, concessions, monopoly franchises, privatisation of operations, etc.) exceeds the purpose of our study. Well aware of its inherent limitations, the aforementioned definition will be used in this work.

2.4 The aims of privatisation

Privatisation processes have both economically and socially far-reaching consequences. Depending on the political stance of the beholder, these consequences are weighted and valued differently. In this section the three basic aims of privatisation programs are described, each followed by its most commonly used corresponding arguments.

2.4.1 Political aims

Political aims are the most controversial, since underlying them are value orientations and distributional interests. Their analysis is further complicated by the fact that these value orientations and interests are seldom unequivocally explicit and can not be neatly classified into some "right" and "wrong" categorisation. Nevertheless, the analysis is of crucial relevance since any encompassing privatisation or deregulation program redraws the power constellation present in a given society. The high political content of a privatisation policy is evidenced by Bös when remarking that „Neither procedure (privatisation and nationalisation) is embarked upon primarily for economic reasons“ (Bös, 1991: 2).

By means of privatisation, the power to decide upon the prices of certain goods and services are to a great extent handed over to private operators. Similarly, decisions about when or what must be purchased are no longer made by politicians or bureaucrats, but by individuals who are usually held accountable in a direct way. Hence, depending on the size of the public sector and its SOE's and the scope of the privatisational effort, this process can completely reverse the power distribution between the public and private sector. This is clearly visible in the former socialist world, where the state was the main contributor to GDP.

A group usually adversely affected by privatisation are the employees of the former SOE's or public units. Since these public units have often been used as a mean to create or stabilise a

certain level of employment, and rationalisation efforts seldom succeeded, in general they were clearly over-staffed. Privatisation affects those who remain in the privatised unit (they are stripped of some benefits and their status as public employees) and, obviously, those who lose their job. Two further groups adversely affected are the unions and those companies that -often working in collusion with the SOE's or public units- made most of their money selling to the state. Normally after privatisation the number of members and concomitant power of the unions dwindle (cf. Börs, 1991). Concerning the suppliers, the perspectives are not as bleak: there are many cases where strong private contractors have integrated "forwardly" and bought their former clients.

As mentioned before, after privatisation the power equation is redefined. While the influence of some groups diminishes, the equation is enhanced by the arrival of new players. To a certain extent, the inclusion of new power holders is an intended aim of the privatisation promoters: by splitting up large SOE's and selling small, independent units, they hope to dilute the strength of particular power centres, to spread property and to foster a new class of small entrepreneurs. According to this argument, through the creation or widening of the middle classes, such measures would not only contribute to economic growth, but also to a healthy democracy (Boorsma, 1994). Similar political arguments have been considered to implement the programs that distributed shares for free, or sold them below market price to the SOE's employees. Other examples of arrivals to the newly formulated power equation can be found in individuals or companies that have been restituted their former possessions or - again of notorious relevance for the developing world- in foreign investors.

2.4.2 Budgetary aims

Most of the time the political struggle behind privatisation is not overtly explicated and budgetary issues or efficiency arguments used instead. Leaving the analysis of the latter arguments for later, it must be noted that the budgetary targets basically are a further mean to enhance macro-economic efficiency and perhaps the main argument mentioned by the supporters of privatisation.

Depending on the type and conditions of privatisation, different budgetary aims are accomplished. The provision of a public service by private units is expected to relieve the burden on the treasury because of their more rational and efficient operation. The provision of such services by private operators sometimes does not only relieve the budgetary burden but actually generate additional resources: this is the case for all those services that are offered to private operators under the obligation to pay a certain fee.

Budgetary aims often are of pivotal relevance for the divestiture of SOE's and their assets. The sale of public enterprises may substantially improve the public cash flow. For many debt-ridden countries of the developing world, it also constituted a mean to reduce the amount of their external debt through "swap" mechanisms. By means of such mechanisms, shares of the newly created companies were exchanged for an equivalent amount of foreign debt.

2.4.3 Efficiency linked aims

Usually the improvement of efficiency is declared the foremost objective of any privatisation effort. Though seemingly neutral and easily measurable, the term is elusive. Depending on the particular definition and its width of scope, certain aspects are included, while others are left out. A basic distinction that must be considered is the differentiation between macro-economic and firm efficiency. If the latter, micro-economic definition is used, some of the targets typically followed by most SOE's are left disregarded. On the other hand, if a broader, macro-economic definition is employed, including targets as for example employment and price stability or fiscal productivity, the possibility to measure and thus compare is severely reduced (CICAP / OEA, 1985:95).

Many other objectives have frequently been mentioned by both advocates or opponents of privatisation (cf. Yarrow, 1986: 327; Hanke, 1987: 2). In general, they can be subsumed under one of the aforementioned three aims. Further objectives are the promotion of economic recovery, the reduction of the power held by public sector unions, or the promotion of the so-called "popular capitalism" through the expansion of share ownership. The debate on privatisation is full of arguments, many based on unsubstantiated premises. In many cases, the premises underlying the aims pursued have to be carefully evaluated.

One of these arguments, commonly used by those who favour privatisations, is that private enterprises are more efficient than public enterprises. This assessment is based on various other partial arguments concerning, e.g., the motivation of management or the question of competition. Though these partial arguments have all been elaborated on extensively, there seems to be no general agreement. As noted by Aharoni, it is "very difficult to generalise that SOE's are inherently less efficient or, for that matter, less innovative than private firms" (Aharoni, 1986: 50). In the following section the main theoretical perspectives concerning the relative inefficiency of public units will be briefly reviewed.

2.4.3.1 The political theory

This perspective analyses the influence that political actors bear on the decision processes of public organisations. The analysis starts from the premises that 1) political success is measured in won elections and that 2) each political actor will principally follow his own electoral agenda. Consequently, a large public sector enhances the means government has to pursue such electoral goals. A typical measure in this respect is to increase or maintain a certain employment level. If such a policy is implemented, the political target may diverge from the micro-economical target. Thus as a consequence of political scheming or opportunism, firm efficiency is lowered. Private enterprises, on the contrary, not only are exempted from such external influences, but are under pressure to generate profits and thus unable to maintain or increase staff level unless economic circumstances indicate to do so.

2.4.3.2 Property rights theory

According to this theory, the sources of both firm and allocative inefficiencies are located in the lack of coincidence between property and disposal rights. Maximal efficiency is expected in those companies where property and disposal rights coincide (e.g. the business of an owner

-manager). This interest in efficiency is also present -albeit to a lesser extent- when management is separated from property but linked to the owner's interests by means of financial participation.

In public units, on the contrary, two factors impede the aforementioned congruence. Above all, the income of public management usually is not tied to the unit's financial performance. On the other hand, and this constitutes the second obstacle, there is no individual or body that actually performs the function exerted by the owners in the private sector.

2.4.3.3 Principal – Agent theory

This model is also based on the link between motivational factors and ownership, but enhances the previous theory by adding the problems generated by the informational asymmetry that further characterises the relationship between principal and agents. As noted by the property rights theory, the menace of a take-over and the risk of bankruptcy are both considered to be significant motivational factors to act according to the principal's interests and pursue efficiency.

The model can also be applied to units under public ownership. In this case, all citizens are considered to be principals, which delegate through elections their power to government (and thus to its ministers); public managers are considered to be the agents. Of crucial relevance for their performance is the lack of motivational factors, since the threat of take-over or bankruptcy is usually deleted by legal regulations. In addition, in any private enterprise, any principal can sell his shares or stake when performance is low, or increase his participation in order to reduce the informational asymmetry and thus increase the level of control.

2.4.3.4 The bureaucratic theory

According to this theory, the bureaucratic environment within public units further widens the goal diversity that characterises the relationship between owners and management. For Niskanen (1980), the sources of greater inefficiencies find their origin in one or more of the following "3Ps": pay, power and prestige. These three components constitute the goals of any public manager. Simultaneously, while micro-economical efficiency is hindered by bureaucratic features (as for example over-regulation, fuzzy targets, incomplete information, etc.), neither pay nor promotions are tied to performance. Hence, in bureaucratised public units economically efficient behaviour seems to be less attractive than to pursue personal welfare maximising pay, power and prestige.

To reach those goals, the public manager must constantly look for ways to enhance his duties and thus the corresponding budgetary means. Naturally, such a behaviour generates allocative inefficiencies (since public goods or services are produced above the optimum) and firm inefficiencies (since production costs are higher than necessary) (Spelthahn, 1994). Public inefficiency derives, following this theory, from the implementation of wrong motivational structures and procedures. Case in point: only those units that use up all their resources are guaranteed a similar amount of budgetary means for the next fiscal year. Even more, only if the resources are consumed before the end of the period, the unit is in a good position to fight for an increase (Niskanen, 1980).

2.4.4 Theoretical perspectives: a conclusion

Based on the previous models it seems that the question of ownership is still unresolved. However, these arguments also highlight the relevance of the aforementioned differentiation between privatisation and deregulation: if public units are privatised in order to enhance macro- and micro-economic efficiency, the corresponding competitive and motivational structures must be present. By the same token, they imply that to increase efficiency, a public unit must not necessarily be privatised: the creation of a competitive environment through deregulation and a restriction on the financing of incurred losses could suffice.

Numerous studies have been conducted to prove the relative inefficiency of public enterprises when compared to private ones. These data has been collected and systematised by Pommerehne (1990). In many aspects, his conclusions coincide with the property rights and the bureaucratic theories: in those areas in which the provision of a certain service can easily be invited to tender and the transactional control costs are low (e.g. garbage collection), private units are usually more efficient than public ones (Spelthahn, 1994: 42). The results are not conclusive in those areas that feature high sunk costs (e.g. huge network investments). Nevertheless, a small majority of the aforementioned studies also point to a relative higher efficiency of private enterprises under such situations. (Spelthahn, *ibidem*).

2.5 Natural monopolies

For many years, those enterprises that operated a network (e.g. railway, electricity, gas or water companies) were considered to be out of reach of the increasing wave of privatising efforts. Their main technical feature was believed to transform them into monopolies that required public regulation. This believe counted with some relevant blessings: in his 1848 published "Principles of Political Economy", Mill (1875: 88) recognised that in the case of utilities, the service is more efficiently provided by one company than by two or more.³ However, the actual regulation of a public service started even earlier, as demonstrated for example by Gladstone's 1844 Regulation of the Railways Act, in the words of C.D. Foster "a far-sighted attempt to write a workable and monitorable licence, as it would be now called, for a natural monopoly" (Foster, 1992: 4). But before starting to analyse what and how is regulated, it is of importance to circumscribe what could be considered to be a natural monopoly.

2.5.1 The classical definition

For a classical perspective, a natural monopoly is present when a single enterprise is able to provide a market at a lower, cost covering price than if provided by two or more enterprises. This perspective is based on two premises: the existence of economies of scale and of decreasing average costs. "The critical and -if properly defined- all embracing characteristic of natural monopoly is an inherent tendency to decreasing unit costs over the entire extent of the market. This is so only when the economies achievable by a larger output are internal to the individual firm, -if, that it to say- it is only as more output is concentrated in a single supplier that unit costs will decline" (Kahn, 1971: 119).

Economies of scale exist when an increase of inputs is followed by more than proportional increases of output. Hence if output is increased, the average costs are reduced, because production costs grow less than proportionally. A characteristic indicator for the existence of economies of scale in natural monopolies are large fixed costs, as e.g. investments in railway, gas, water or electricity networks.

According to the classical theory, natural monopolies have to be regulated by some authority in order to ensure allocative efficiency because a monopolist would, according to the Cournot theorem, set both price and production at a level where marginal costs equal marginal income. At that monopolistic price and output level, monopolistic income is maximised. It is exactly this redistribution through the skimming of consumer rent that justifies -in the classical theory of natural monopolies- the need for public intervention.

2.5.2 The theory of contestable markets

This necessity was questioned by the theory of contestable markets developed in the early 80's by Baumol, Panzar and Willig (1982), among others. The behaviour of the monopolist is influenced, according to this theory, by the existence of potential competitors. The threat of the arrival of new enterprises, that is, if the market is contestable, would discipline the monopolist and thus make any public regulation superfluous. According to Baumol et al., a monopoly should only be regulated if the enterprise presents a subadditive cost function and its investments are irreversible.

2.5.3 Subadditivity and irreversibility

In the classical perspective, all natural monopolies were considered to have a subadditive cost function. In other words, the monopolist was considered to serve the market cheaper than two or more enterprises would. Baumol (1977) showed that the correct definition of natural monopoly is not that long-run average costs decline, but that the cost function is "subadditive". Subadditivity is defined by a situation where the costs of one firm that provides a service, including its transaction costs, are lower than the costs of any two or more firms who would provide the same service. Subadditivity integrates the concepts of scope and scale economies and transaction costs, and justifies a monopoly if subadditive cost characteristics were exhibited (Shames, 1999; Geddes, 1998).

Baumol's analysis pointed out that the existence of economies of scale respectively of decreasing average costs is a sufficient, but not a necessary condition for the subadditivity of a cost function. In the multi-product case, Baumol showed that economies of scale are neither necessary nor sufficient for the subadditivity of costs. However, next to the analysis of economies of scale, an analysis of the economies of scope must be performed. Economies of scope are present when the costs of the combined production of certain quantities of two (or more) products are smaller than the costs of their separate production. Probable sources of economies of scope are for example the common use of inputs. When analysing the subadditivity of a many-products enterprise, both type of economies play a significant role, since the economies of scale may be compensated by diseconomies of scope.

The proof of subadditivity in a many-products situation requires insight into the cost structure of all potential producers for a specific demand. Such an analysis requires much detailed information, making the proof of subadditivity an extremely difficult endeavour.

Irreversible costs, on the other hand, are “sunken” costs, past investments e.g. in some kind of works or infrastructure. Their absence is the main feature of contestable markets (cf. Baumol et al., 1982). For the settled provider, these costs are not included in the short range decisional processes. They amount to a barrier, however, for any potential competitor. Any potential competitor can only invest if the expected profit covers both irreversible and reversible costs.

The existence of these costs implies that an inefficient monopolist is not threatened by potential competitors as long as the efficiency advantage of the newcomer is smaller than the sunken costs. The higher the irreversible costs, the stronger the screen against competitors.

2.5.4 The subadditivity / irreversibility matrix

In summary, the detailed analysis of natural monopolies provided by the theory of contestable markets proofed that decreasing average costs over the whole market is a sufficient, but not necessary condition for the existence of a natural monopoly. For specific natural monopolies, where no sunk costs exist, regulation is considered to be superfluous. Above all, the theory highlighted the relevance of two independent variables: subadditivity and irreversibility. In the following matrix (see Table 2-1), the four possible combinations are represented.

Table 2-1
The subadditivity / irreversibility matrix

| | | Irreversible costs | |
|---------------|-----|---------------------------|-------------------------|
| | | No | Yes |
| Subadditivity | No | (1) Active competition | (2) Active competition |
| | Yes | (3) Potential competition | (4) Regulation required |

Field 1 represents the classic situation of active competition: in a market with enterprises lacking subadditivity and sunken costs, any kind of regulation is superfluous. In the second field we find enterprises in which no longer subadditivity exist, but irreversible costs are still present. An example of such an industry is the generation of electricity: technological advances permit to produce electricity efficiently by small units (even solar or eolic) that is then delivered into the grid. Also in this cases regulation seems superfluous and active competition reasonable.

The third quadrant represents situations in which the existence of potential competitors suffice to discipline the monopolist. Examples of field 3 are the delivery of letters or parcels or -of importance for this study- the operation of passengers and freight trains. Again, regulation is not necessary. The last quadrant includes all those “natural” (or technical) monopolies where

subadditivity and irreversible costs are present and public intervention is required. Typical for this category are enterprises with fixed networks as e.g. gas, water, electricity, telephone or railway systems.

In summary, according to the theory of contestable markets, only if the two aforementioned conditions coexist, there is a natural monopoly, and public intervention is required. A salient issue lies in the fact that the activities of most utilities can be broken down into three different components: production, transmission and distribution. Most scholars agree that the usually vertically integrated utilities can be “unbundled” and that the production stage is inherently competitive in most cases (Crandall, 1997). Thus for example, while the generation of electricity is no longer a natural monopoly, the transmission network still is. By the same token, the railway network is a natural monopoly, but the operation of trains is not.

2.6 Regulation of natural monopolies and competition: some alternatives

The privatisation or deregulation of natural monopolies was completely out of question until not very long ago. This tradition has been broken by Mrs. Thatcher’s successful privatisation of British Telecom in 1984, only to be followed by other divestitures in the UK (British Gas, the Water Authorities, etc.) and elsewhere. The rupture of monopolic enterprises or industries are usually accomplished by diverse means. This section will offer a broad overview of the currently used regulatory and competition-enhancing mechanisms, specifying their respective benefits and disadvantages.

2.6.1 Rate of return regulation

This mechanism basically regulates the yield obtained by the owners. The initial price level and its further alterations should allow a “fair” rate of return on the invested capital. This brief description reveals the mechanism’s main weaknesses: since profit is primarily tied to the amount of invested capital, there are practically no means to induce a cost-conscious use of resources or to foster the introduction of efficiency-enhancing technological innovations. Secondly, and based on the same reason, there is a tendency to capitalise in excess (Averch - Johnson effect). A further weakness lies in the considerable amount of information the regulating body has to obtain in order to determinate if a price increase is justified or not. Under certain circumstances, the informational asymmetry can lead to the “capture” of the regulator by the monopolist.

2.6.2 Price – cap regulation / RPI – X

This mechanism intends to avoid the weaknesses of the rate-of-return regulation. First proposed by Littlechild for the privatisation of British Telecom, by now it is the main regulation mechanism in the UK.

The main feature of this mode is that for a given period of time -usually four to five years- the company is able to introduce any modification to its prices, under the condition that the average price of a previously specified basket of products or services does not exceed a certain value or index. This index is provided by the RPI – X formula, where RPI is the Retail Price

Index and X a factor determined by the controlling unit and basically related to the expected efficiency. Once the period finishes, the controlling unit is free to set a new value for X .

As mentioned above, $RPI - X$ avoids many of the dysfunctional consequences of the rate of return mechanism. Above all, thrifty behaviour is induced, since the obtained results can (or must, in the case of losses) be kept by the monopoly. Based on the same reason, enterprises regulated by $RPI - X$ usually avoid the inefficiencies described by the Averch – Johnson effect. On the other hand, increases in efficiency can be passed on to the client; as a matter of fact, $RPI - X$ prices tend to be lower than those formed under the rate of return practice. An additional advantage concerns the issue of auditing: $RPI - X$ is far easier to control.

There are, however, some difficulties in its implementation and control. The main obstacle resides in setting the X factor. It is clear that if the figure is too high, the monopoly will exert pressure to redefine it; if X is too low, consumers will protest. A further weakness of this mechanism is that it can lead to a covert use of the rate of return mechanism. Since in a last analysis, X is a negotiable factor, the monopoly can employ its available political means to reduce X to a desired level. If such ex-post negotiations take place and the factor is redefined, the situation does not differ from a rate of return arrangement. Hence it is of utmost importance, when implementing $RPI - X$, to specify, the conditions under which X can be altered before the expiration of the period.

2.6.3 Yardstick competition

This instrument is extremely useful when two or more regulated companies operate in the same or at least similar markets. The basic idea behind yardstick competition is to compare the performance of each enterprise with the performance of the most efficient enterprise or the sector's average. The information obtained can then be used to intervene, e.g. through price controls. Though theoretically it can be applied where the market is shared by just two companies, it is most useful in situations in which many companies compete, as in the case of garbage collection, bus transport, etc..

2.6.4 Common carriage

Common carriage implies the possibility for any enterprise to use the infrastructure of a certain system. As an example, different railway operators may use a common track system that belongs to a third enterprise (public or private), or diverse shipping companies may use the waterways maintained and commercially exploited by another organisation. The common carriage model is not a regulatory mean but an instrument to increase and enhance competition. It has been successfully implemented across diverse sectors and nations, the first experiences taking place e.g. in electricity in the UK and railways in Sweden.

2.6.5 Franchise bidding (concessions)

The main idea behind this procedure is to allow many companies to compete for one market whenever the competition within this market is unprofitable for two or more enterprises. Already in 1859 Chadwick proposed to organise a "competition for the field as compared to a

competition within the field". Resuming Chadwick's ideas, Demsetz (1968) developed an "auction" model in which at least two companies compete to be the only providers of a certain market. The auction is organised by the government, specifying the required conditions. The interested bidders then submit closed offers, including their basic business proposal and the price they would pay for the concession. The most efficient bid is then awarded the monopoly right over the market for a specified period of time.

There are many alternatives to this basic mechanism: in some instances, the state may take on with the construction or enhancement of the network, thus carrying the bulk of the future sunken costs. Under such conditions, the concession may be shortened to only 5 to 10 years. The larger the investments done by the franchisee, the more difficult it is to set an according period of time for the concession, since all sunken costs that have not been amortised constitute a barrier to exit for the current operator and a barrier to entry for its successor. Considering that investments in areas like railway, sewage or water systems take more than half a century to pay off, it is of utmost importance to neatly regulate the price to be awarded for all investments not written off by the time the period of concession expires.

As mentioned by Vickers (1988), a further difficulty inherent to this mechanism is the considerable chance of collusive behaviour by the potential bidders. This danger can only be circumvented through wide publicity and the attraction of many bidders, thus making secret arrangements an impossible task.

2.7 Deregulation and privatisation in Argentina

Although considerable differences in the pace and depth can be found between Latin American countries, privatisation has transformed the region's social and economic landscape. This policy, which started in Chile in the mid-1970s (cf. Valdés, 1993) has expanded amidst stabilisation and structural reform programs during the late '80s and '90s.

The share of the GDP generated by Argentinean SOE's, which had a significant and growing economic and political role as in most Latin American countries during the '60s and '70s, did not differ significantly from the averages that could be found in both developed and developing countries (Short, 1984; Devlin, 1992; Rausch, 1993). Their origin and evolution are comparable and can be traced to mainly ideological, national security or industrial and development strategies.

Argentina had approximately 300 public financial and non-financial SOE's in 1982. The overall weight of the Argentinean public enterprise sector before privatisation started in 1989, was approximately 7% of GDP, 56% of public sector deficit, 26% of an external debt of US\$ 58.5 billion and 290.000 employees, i.e. 2.8% of the total labour force (Rausch, 1993). Public utilities in the fields of energy, transport, telecommunications and water constituted nearly 90% of the SOE's, the other 10% being formed by industries related to the Ministry of Defence (mainly steel, chemicals and petrochemicals).

The neo-liberal ideology that swept through both developed and developing countries gained strong adherence in Latin America's newly elected democracies. The implementation of neo-liberal politics had many roots: to a certain degree, it was the result of the International

Monetary Fund's (IMF) programs. The depth of the changes, however, suggest that there was more than simple compliance with the indications of the International Monetary Fund. Many Latin American countries, Argentina playing a paradigmatic role, have fully embraced deregulatory processes. This commitment can only be understood after considering what the state as such and particularly the SOE's have been considered in Latin America: a parasitic apparatus, whose representatives embodied for a majority of the population only arbitrariness, incompetence and inefficiency (Dirmoser et al. 1993: 12). When the debt crisis erupted in the early 80's, the SOE's overall financial performance set a burden on the fiscal accounts. The consequent adjustment process further eroded the quality of service and capital base in many sectors, enhancing the popular endorsement of deregulation policies.

In general terms, the deregulation processes in the area approached the necessary reforms incrementally, starting with the restitution, transfer or liquidation of medium and small-size enterprises, while stabilisation measures took hold, to move in a second phase to the larger non-tradable service sectors (Rausch, 1993: 2). On the contrary, given its fiscal restraints and the presence of a politically advantageous environment (political capital of the newly elected government and weak opposition), Argentina began a massive, rapid and encompassing "sell first" policy.

To understand this speedy and overriding deregulation process, Argentina's particular setting has to be analysed. On this issue the inflationary process plays a key role, particularly the hyperinflationary episode in mid-1989, a year in which prices soared above 4500%, and a second one during early March 1990. This situation generated serious fiscal constraints, which wore out public policy tools and access to financing.

Amidst this situation, the population and the main economic operators discounted President Alfonsín's political capital, which led to a loss of credibility, governance capacity and the elections and, finally, provoked the anticipated departure of Alfonsín's government and the take-over by the incoming elected administration of the peronist government under President Menem.

Immediately after taking office in July 1989, the government began to advance towards state reform by presenting an ambitious legislative package to Congress for its enactment and implementation. The basic policy can be summarised in the term subsidiarity: in his first message to Congress (July 1989), Menem declared that all that the private sector, provinces and municipalities can undertake by themselves will not be done by the National State.

The State Reform Law (Ley 23696, August 1989) set the rules and procedures for deregulation and privatisation. Preparatory conditions included e.g. transfer of rights, statutory reforms, dissolution and liquidation of entities or the assumption of total or partial liabilities. The main modalities employed for the deregulatory process have been: asset sale, share offerings, lease and management contract with or without purchase options, concession and license. The selection procedure included public bidding, public competition and auction, with or without baseline prices; share offerings in different markets and direct contracts.

The main stated target was to start an overall divestiture process which would increase fiscal revenues to service both internal and external debt. This latter end could also be accomplished

through debt-equity swaps, a mechanism instrumented for debt reduction. Further objectives have been to contribute through the divestiture process to stabilisation and to improve the quality and coverage of the remaining public services. The process was backed by a World Bank Sectoral Public Enterprise Reform Adjustment Loan and a Technical Assistance Public Enterprise Reform Execution Loan. Both packages provided the necessary funding for layoffs, early retirement packages and consultancy.

The aforementioned “sell first”, comprehensive and massive privatisation strategy was launched because of the acute economic, financial and political constraints that Argentina faced. On the other hand, the government neither had the means to finance a SOE’s restructuring process (which requires consistent and substantial investment capacities over extended periods of time) nor the political will (past experiences indicate that this was a rather impossible endeavour). Thus, the opportunity was seized and the problems tackled under an incremental, step by step approach.

The financial results of the privatisation program have helped to restore stability. Between 1990 and 1994, the government obtained \$9920 m. in cash, and reduced its debt by some \$27.5 b. through debt-equity swaps (MOSP, 1995). Perceived country risk has been drastically reduced; capital inflow increased manifold.

2.8 Deregulation and privatisation of the Argentinean railway system

From 1985 until 1989, Ferrocarriles Argentinos on average lost some \$2 m. a day, a deficit equal to 1% of GDP or 3% of the national budget. Thus it came as no surprise when in 1989, and by decree 666 (September 1, 1989), the government announced the privatisation of the Argentinean railway system.

Many and diverse mechanisms have been used to accomplish this target, always using the term “privatisation”. Paradoxically, only in a few cases the mechanism implemented was an actual privatisation, that is, the direct transfer to private hands. Grossly simplified, the divestiture followed three main lines: a) the concession of the bulk of the network, b) the transfer to the corresponding states (“provincialización”) of specific –usually unprofitable or even closed– lines, and c) the sell up of all assets not transferred through the previous means.

The design of the concession process was built around the a strategic decision that proved to be of crucial relevance for its success: the concession would not offer the whole operating system (some 35 000 km by the time of privatisation) as one package, but partitioned into several financially attractive units. Two main reasons backed this decision: politically, it was considered to be more acceptable to hand over the system to many operators than to only one (which, given the capital requirements, would most probably be a foreigner); the economic reasons were related to the fact that since the capital requirements would be substantially lower for each unit, the number of bidders would increase, thus enhancing the aforementioned competition for the market and avoiding collusive behaviour.

Following recommendations of a UNDP commission (PNUD, 1988), the system was divided into three “businesses”: freight, interurban passenger services and metropolitan services.

Leaving for later the concession process of the metropolitan services, the following lines will briefly describe the privatisation of the cargo lines.

The cargo lines were the first to be franchised and to some extent constituted the model according to which the other concessions were forged. The cargo system was divided into six subsystems, to be handed over for a period of 30 years through a public, international auction. The mechanism employed was an "integral concession", i.e., the franchisee must take charge of all railway related activities: marketing, operation maintenance, and the rehabilitation of rolling material and infrastructure.

As mentioned before, the concessions were awarded through a public and international bidding. The process' main steps have been:

- 1) Public and international invitation to tender.
- 2) Interested enterprises present their technical and economical qualifications (Envelope A).
- 3) As a consequence of Ferrocarriles' monopolistic situation, no private company in Argentina had the necessary technical knowledge. Thus all bidders were required to include as a partner a foreign operator responsible for the actual operation of the system.
- 4) Those companies that qualified according to the first presentation submit their business proposal, including their economic, financial and investment plan for the whole period (Envelope B).
- 5) Selection
- 6) Awarding
- 7) Signature of contract (max. 90 days after the awarding).
- 8) Transfer (max. 120 days after the signature of contract)

This procedure has also been used in the case of public units that belong to other sectors. The use of two different qualification instances intends to assure that only qualified companies enter the last phase. The selection procedure consisted of a point rating system of the submitted operative, economic and financial plans. Of utmost relevance were the following criteria: a) the net present value of the planned investments; b) the net present value of the fees to be paid to the government for the use of tracks and rolling material; c) the number of FA employees the new operator would assume; d) the proposed personnel training program and e) the planned service improvements.

2.8.1 The concession of the cargo and intercity systems

At the end of 1991 the second round of privatisations began, including among others the energy, water and transport sectors. As a consequence, between November '91 and December '93, approximately 27 200 km of track were transferred through concessions to private

operators (see Table 2-2), among them the former Mitre line. This 4500 km long line was handed over to its new operators in December 1992 and renamed “Nuevo Central Argentino” (NCA).

Table 2-2
The Argentinean Railway Network

| | ex ante (1989) | ex post (1999) | |
|---------------|-------------------|-------------------|--------|
| | | private | public |
| suburban | 1543 | 885 | - |
| long distance | 32518 | 21085 | 9380 |
| total | 34061 | | 31350 |

Roughly 9000 km of tracks were handed over to the provincial states. About half of them still were in operation by 1989; the other half had been closed during prior rationalisation attempts in 1978 and 1984. The provinces usually followed the policy of the central government and tried to privatise them. This was an extremely difficult task since many tracks belong to FA former tertiary network and the cost-benefit relation of their operation is highly negative. All those provincial lines that found no private operator have been closed by March 1993.

2.8.2 The concession of the metropolitan railway system

In early 1991, the bidding process of the cargo lines well in advance, the central government decided to separate the Buenos Aires suburban railway system from Ferrocarriles. Thus in March 1991 Ferrocarriles Metropolitanos Sociedad Anónima (FeMeSA) was created. FeMeSA was awarded further degrees of autonomy, and constituted, from a legal point of view, a new entity. A few months later the central government took an even more radical stance and decided to privatise FeMeSA.

From the very outset it was clear that even after huge efficiency improvements and substantial increases in the number of transported passengers, the financial results -contrary to the cargo lines, which were economically self-supporting- would not cover expenses. Nevertheless, the government decided to go on, starting with what is considered to be world-wide the first international auction for a suburban railway system co-financed by public subsidies. In other words, the basic proposal was to subsidise all those operations where incomes would not cover exploitation costs.

With the purpose of privatisation the entire metropolitan system has been divided into seven units, approximately congruent with the six lines that converged in Buenos Aires. The decision to further divide the system was taken because of the aforementioned political and economic reasons and to increase comparability. As for the previously transferred units, the privatisation actually took the form of concessions. The basic features of the concession contracts are:

- > the term of concession is 10 years, indefinitely renewable for other 10 years periods.

> the infrastructure, fleet and all installations are handed over to the operator, the state retaining their property. The operator takes charge of all railway activities, from marketing to the maintenance of the aforementioned assets.

> the state defines the maximal tariffs, minimal frequencies and the quality conditions. If the operator reaches or improves these standards, price increases above the set tariffs are automatically conceded. If the operator does not meet these standards, a financial punishment is accorded.

> the concessionaires have the freedom to negotiate new labour conditions and define the number of employees. The state is responsible for all exceeding personnel.

> for the first term of concession, the state defines a minimal investment plan for infrastructure, fleet and installations. Each concessionaire may, if considered convenient, invest in additional works of infrastructure, but always at his own cost.

> each concessionaire must include a foreign operator that is responsible for the technical operations of the company.

> in their respective proposals, each bidder has to include a business plan stating, for each year of the concession, a forecast of the financial outcome. In addition, each bidder has to specify an estimate for the investment plan. These two values build the financial outcome; if it is positive, the concessionaire must pay a specific fee ("canon") to the state; if it is negative, the concessionaire is entitled to ask the state for a subsidy. The bidding process of each of the seven units is won by the bidder that offers the largest fees or requires the least subsidy.

A central aspect of the followed deregulatory strategy is that once a specific fee or subsidy has been accepted, it is valid over the whole period of concession. From that we can infer that the concessionaire runs the intrinsic risk of any entrepreneurial activity: if the number of passengers (and hence the income) is above the estimated figures, this additional income belongs to the concessionaire, thus increasing profitability. If, on the contrary, the actual demand is lower than expected, the operator has to absorb the losses. This also applies to operative costs; profits resulting from any lowering of the estimated costs belong to the operator. By the same token, any additional costs not included in the business proposal has to be covered by the operator.

Though the operator will try to reduce the operating costs, the bottom line is delimited by requirements concerning the number of services to be delivered (amount of carriages to be run on each track) and their quality (maximal percentage of cancelled trains or belated arrivals). If the standards set by the bidding process are not kept, financial penalties are applied: the fee is incremented (or the subsidy reduced) and the companies are not allowed to adjust their tariffs in real terms.

From the time the Argentinean government decided to deregulate the metropolitan railway system (April 1991) until the pre-adjudication of each of the seven subsystems (December 1992) only 20 months elapsed. The bidding, promoted in the USA, Canada, Europe and

Japan, had considerable success: seven groups participated in the process. In the most attractive lines, the seven bidders submitted proposals. No bidding process counted with less than three proposals.

2.9 Summary

As other sectors of the Argentinean pre-deregulation economy, the railway system was radically transformed. Broadly speaking, the system has been unbundled horizontally, i.e., following line and business criteria (Rodríguez Pardina, 1996: 5). The resulting units thus had to administer both production and the network. This runs counter to other privatisation experiences, where the system is unbundled vertically: in Sweden, Switzerland and the UK for example, infrastructure has been separated from operation, a policy that has been suggested for all European rails (de Waele, 1993). Once Ferrocarriles was divided, the resulting business units were auctioned off. In a first round all six cargo lines were handed over as 30 year long “integrated” (that is, not-unbundled) concessions. These bundled concessions include marketing, operation maintenance and rehabilitation (Rausch, 1993: Anexo 1;). Aware that even efficient passenger services of the metropolitan area would incur heavy losses, the World Bank funded Railway Restructuring unit started a unique experience: the 7 units in which the metropolitan system was partitioned were handed over to those bidders that required the lowest subsidy. As a consequence of the lower investment requirements, suburban concessions lasted in principle a third of the period of the cargo concessions (i.e., ten years). In all cases, the Argentinean state keeps the property of all physical assets, but hands them over to the new operators for exploitation.

The deregulation of the Argentinean railway sector was not preceded by a thorough study of the market’s contestability. This notwithstanding the whole process has been extremely successful. “Viewed in its entirety, the Argentinean government accomplished in just three years a remarkable and, given its magnitude, world-wide unique restructuring process in the railway sector” (Knechtel, 1993: 491). No encompassing study has gauged the long term effects of this process. However, a substantial decrease of the public budget has been reported by many observers (Knechtel, *ibid*; Kogan, 1994; 1995b; Pipan, 1994a). In short, though a precise quantification of the overall effects of the “regulatory reform” (Stigler, 1981) is still pending, the results hitherto obtained are outright positive and in line with the outcomes reported by Crandall and Ellig (1997) for the American railroads.

¹ Here „liberal“ is used as a synonymous for „conservative“. This position holds that the key to economic development lies in reducing the size and role of government in the market economy through deregulation of the financial sector, privatisation and lower taxes. Broadly speaking, the term „interventionist“ stands for a position that, among other issues, advocates a stronger involvement of government in the economy. Its meaning partly overlaps with the common usage of the term „liberal“ in the US.

² In their distinction, LeGrand and Robinson (1984) state a reduction of regulation as a kind of privatisation.

³ „It is obvious, for example, how great an economy of labour would be obtained if London were supplied by a single gas or water company instead of the existing plurality“ (Mill, 1875: 88).

3. Organisational culture

3.1 Introduction: the need of a delimitation

More than two decades after practitioners, consultants and scientists started giving their attention to the issue of organisational culture, the field is far from reaching a commonly supported, unambiguous definition. The absence of such an unquestioned definition generates considerable difficulties, since a) the width of the definition can play a crucial role when the possibilities of cultural management or the performance of a change program must be measured; b) people feel free to use the concept resting upon purely intuitive knowledge and, finally c) it fostered the view of this particular field as being non-scientific.

Justified doubts have been voiced concerning the actual need (and the convenience) of such a definition. The possibility to make an active use of the myriad of perspectives and definitions without serious methodological restrictions may be viewed as a liability, but it certainly holds some analytical advantages. Even more important, and as noted by Alvesson and Berg "reducing [culture] to a rigid framework or precise and absolute definitions would seriously reduce its inborn complexity" (1992: 48).

The strong interdisciplinary character of the field enhances the aforementioned difficulty. The plurality of perspectives, approaches and definitions retarded the formation of a common analytical frame. Finally, a common definition seems difficult to arrive at because the concept "organisational culture" is formed by two words, each showing considerable latitude in their respective definitions.

The lack of a commonly supported definition notwithstanding, some advances have been reached regarding the construction of a common framework and the differentiation of the main approaches and perspectives (cf. Smircich, 1983; Allaire and Firsirotu, 1984; Alvesson and Berg, 1992).

The main line of cleavage divides the field among those researchers that treat culture as a variable, and those who see it as a root metaphor (Smircich, 1983; Alvesson, 1993: 13). Culture is elaborated as an (independent) variable "in the rationalist perspective of popular writers such as Peters and Waterman or Deal and Kennedy, as well as in the functionalist perspective exemplified by Schein. Culture is used as a metaphor in the symbolic perspective, which draws on the works of anthropologists, especially Geertz" (Rowlinson, 1999). The main differences between both perspectives are summarised in Table 3-1.

Central to the "culture as a metaphor" perspective is the idea that symbolic resources (symbols, metaphors, concepts and images that are representations of reality) can be used to elicit and guide corporate strategic action. For those authors that support this view, the culture of a company cannot be changed: "By definition, a corporate culture cannot be forced upon a collective, nor can it be controlled or manipulated at will" (Alvesson and Berg, 1992:168). However, these authors acknowledge the possibility to start an emancipatory process making "people aware of and illuminating certain aspects of the culture in which they exist"

(Alvesson and Berg, *ibidem*). On the other hand, those who treat culture as a variable consider culture to be a further subsystem of the organisation, holding the same ontological status as structure, technology or strategy. The most salient feature of this perspective (and specifically of the American contributions, cf. Deal and Kennedy, 1982; Peters and Waterman, 1982; Kilmann et al., 1985; Kilmann and Covin, 1988) is its instrumental view of cultural phenomena.

Table 3-1
Main differences among perspectives¹

| | culture as a variable | culture as a root metaphor |
|----------------------------|---------------------------|----------------------------|
| conception of culture as a | socio-cultural system | system of ideas |
| the organisation | has a culture | is a culture |
| orientation | results oriented | process oriented |
| main goal | transformation | explication |
| approach | functional , instrumental | interpretative |

¹ adapted and revised from Kaschube (1993: 105); Buchanan and Huczynski (1997: 514)

3.2 Delimitation of the concept

As a further consequence of the attempts made “towards more rigorous conceptualisations of both the concept and the field” (Sackmann, 1997: 1), there is agreement among most scholars about what organisational culture does not encompass. In the following lines the concept here under scrutiny will be demarcated from other fields. Such a differentiation seems to be necessary since to a considerable extent, the field of organisational culture has been unduly related to other areas of interest within the field of organisational theory.

3.2.1 Organisational culture and Organisational Development (OD)

Looking at Schein’s definition of organisational development we are tempted to believe those who recognise in the field of organisational culture, and particularly in its more instrumental approaches, a simple reformulation of this older technology: “OD is a response for change, a complex educational strategy intended to change the beliefs, attitudes, values and structure of organisations so that they can better adapt to the new technologies, markets, and challenges, and the dizzying rate of change itself” (Schein, 1969: 2).

A first difference constitute the respective contents. OD is an application oriented change technology, its scope less wide than the one of the field here under analysis. But even the more instrumental approaches within this field can be differentiated from OD (Alvesson and Berg, 1992). A comparison between intervention techniques proves that, for example, within the frame of OD, group techniques (e.g. Team building activities) were the most commonly used means of intervention. As will be shown later on, the organisational culture approach owns a wider instrumentarium. Secondly, the implementation of OD measures was generally

aimed at the individual; on the contrary, the new approach is aimed at the whole institution (Kaschube, 1993: 110).

However, nobody denies that the theoretical knowledge and practical experience gained through OD formed the basis of the field of organisational culture to a considerable extent. These similarities have led some researchers to propose to maintain the old denomination. Probably because of a "certain aversion" developed against OD (von Rosenstiel et al., 1988: 196) it was decided to change the denomination. Kilmann and Covin have formulated this thought very clearly: according to them, "to keep the new ideas of transformation under the rubric of organisational development would be to give them the 'kiss of death'." (1988: 3).

3.2.2 Organisational culture and corporate ethics

Both fields are concerned with values and norms, but they investigate different issues. While research conducted within the organisational culture field is aimed at the measurement and transformation of the aforementioned elements, the study "of corporate ethics concentrates its efforts in their justification" (Osterloh, 1988: 145). The starting point of this line of thought is based on the increasing awareness and responsibility of decision-makers concerning society and environment and the conviction that their own work is not a ethically neutral, purely rational activity (cf. Pawlas, 1991: 384).

Nevertheless, that both concepts are often used interchangeably has less to do with the fact that both fields study the same objects. Since the instrumentalisation of values and norms should be checked for their ethical orientation, researchers and managers alike eschew to use both concepts separately.

3.2.3 Organisational culture and corporate identity

Though used as synonyms, the concepts of organisational culture and corporate identity are not interchangeable but causally linked: the culture of an organisation mediates a certain corporate identity. Different approaches within the prescriptive (organisational) theory bear as main purpose the creation of a culture that leads to a corporate identity with which employees can identify (Kahle, 1988: 1231). A further difference between both concepts has clearly been stated by Alvesson and Berg: "Corporate identity is the concept that the marketing professionals use to capture the visible manifestations of the organisational culture. It is essentially considered a collective property, a commonly shared understanding of what the organisation stands for and how it should operate" (1992: 145).

3.2.4 Organisational culture and Organisational climate

Employees hold diverse ideas or preconceptions concerning for example the appropriate behaviour of colleagues and superiors, participation, compensation, etc.. Such expectations can be understood as targets to be met. The climate within an organisational environment is an expression of the degree of fulfilment of the working conditions desired by the majority of the members. In other words, these expectations build the frame in which the climate develops (Kaschube, 1993: 109). Consequently, while these preconceptions indicate the ideal situation to be reached, the climate mirrors the discrepancies between the desired and the actual

situation. Both approaches partly compete and overlap; their (dis-)similarities strongly suggest a complementary use (cf. Mullins, 1996: 716; Bögel, 1991; Kaschube, *ibid*).

3.3 The adopted definition

In spite of the aforementioned advances, the question of defining corporate culture remains problematic (Rowlinson, 1999: 371; Buchanan et al., 1997: 516). The perspective problem is compounded by the definitions themselves: many authors, particularly those that follow an instrumental approach, try to define the concept citing all those cultural elements that it presumably contains (cf. Ouchi, 1981; Schein, 1985). In a strict sense, these are not even definitions, since just by citing those elements the concept presumably contains, it is not defined. In addition, these enumerations are often controversial, reducing their value as (so-called) "extensional" definitions.

Throughout this thesis, Hofstede's concise definition has been used. According to this author, the culture of an organisation is the "collective programming of the mind which distinguishes the members of one organisation from another" (Hofstede, 1991:180). The consequences and advantages of this definition become clear when comparing it to other conceptualisations.

Hofstede's definition has the advantage that it approaches the concept from another direction; instead of using vague metaphors or always disputed listings, i.e. using the output of the cultural processes, he defines the concept through an superordinate instance, the „collective programming“, that involves any ideal cultural element. Avoiding the weakness present in other definitions, the one coined by Hofstede has wider applicability. Secondly, since no concrete examples are used, the definition can be used for any social unit.¹

Many other definitions clearly suggest that each company has or develops "a" culture, which in addition to its uniqueness is characterised by its harmony, cohesion and homogeneity. (cf. the criticism formulated by Smircich, 1983; Alvesson and Berg, 1992). These impressions are seldom corrected afterwards. This error is also avoided in the definition here adopted.

In summary: Hofstede's definition circumscribes in concise manner the phenomenon under analysis without the use of disputed enumerations. Wide applicability with no loss of conciseness is thus ensured. These analytical advantages support its generalised use and have been pivotal in the decision to adopt it here.

3.4 Shared perceptions of daily practices

Irrespective of these advantages, it remains open what exactly is programmed into the mind of the company's employees and, secondly, what specific elements distinguish the members of one organisation from another.

The core of an organisational culture, and hence what actually differs from one organisation to another, are the perceptions of daily practices that a company's employees share (Hofstede, 1991:182). What a company programs into the mind of its employees are the meanings attached to certain practices. If, for example, every member of a firm gives the same importance (or irrelevancy) to the issue of punctuality, it can be said that the organisation

succeeded in programming them. Similarly, if a majority of the employees share the belief that only the least effort must be done in their jobs, some form of cultural programming has taken place.

Next to such attitudes, which will be elaborated in depth later on, the practices held within an organisation encompass basically three elements, namely rituals, heroes and symbols. If a certain person, e.g., the memory of the deceased founder of the company, has the ability to arouse similar feelings or behaviours among the personnel, again it can be said that the organisation succeeded in programming them.

3.5 How practices are generated and influenced

The shared perceptions of daily practices, or “practices” for short, have their origin in the socialisation process at the workplace. The meaning of a certain symbol, a certain attitude towards rules, the significance of a ritual: this knowledge is learned while working within a group. Consequently, the practices are a by-product of the experience shared by a group and can therefore only be found where there is a definable group with a significant common history of problem solving (Schein, 1985: 7). Summarising the most relevant views about the way culture is created and modified (cf. Schein, *ibid*; Dyer, 1984b; Pettigrew, 1979), four ways seem of importance, namely a history of common problem solving, the leadership style, the organisation’s systems and procedures and its strategy and structure.

3.5.1 Joint problem solving

Practices emerge as a consequence of the interaction between the members of a group with the purpose of solving two fundamental problems: internal integration and external adaptation (Schein, 1985:148 ff). Solutions that consistently solved these problems are shared by the group and passed on to the new members as the correct way to approach specific situations. If the group has a stable membership and enough time elapsed to build a common history of joint problem tackling, the commonly developed solutions become practices that are taken for granted.

The concrete mechanisms by which culture is learned are context specific and have been addressed by diverse theories. According to Schein (*ibid.*) the group dynamics and open - systems theories provide important insights on the way the members of a group interact with each other and thus shed light on the emergence of common understandings. On the other hand, the mechanisms used by founders, owners or leaders in order to transmit their own views to the other members are best explained by leadership theory. Finally the learning theory, and particularly the trauma-based-learning and the positive reinforcement models, are of considerable help when trying to understand why some commonly developed solutions become practices but others not.

3.5.2 Leadership

As mentioned before, certain individuals have the means to impose the values they bear on the other members of the group or company. Owners, founders and entrepreneurs are not only situated in highly visible positions but also have a major impact on how the group defines and

solves the issues of environmental adaptation and internal integration. For Schein “a *unique function of ‘leadership’*, as contrasted with ‘management’ or ‘administration’ is the *creation and management of culture*” (1985: 171).

Leaders create and manage culture through a variety of means, often completely unaware of the cultural significance of their action. Drawing again on Schein, “the most powerful mechanisms for culture embedding and reinforcement are (1) what leaders pay attention to, measure, and control; (2) leader reactions to critical incidents and organisational crises; (3) deliberate role modelling, teaching, and coaching by leaders; (4) criteria for allocation of rewards and status; (5) criteria for recruitment, selection, promotion, retirement, and excommunication” (1985: 225).²

3.5.3 Systems and procedures

The systems and procedures that govern an organisations’ daily activities also have the ability to build (or reform) a given set of practices. This influence is exerted in two dissimilar ways. In an immediate and explicit way, these systems direct the behaviour of the employees and thus form practices. A second way in which a company’s systems build or modify practices are the less overt messages sent by these same systems or procedures. Though such messages can be sent by any particular system, their influence on cultural matters can be most clearly observed in those norms that focus on personnel issues.

The remuneration policy also exerts a strong influence on the formation of specific cultural traits. If pay is closely linked to performance, normally a results orientation permeates the employees’ mind. In analogous fashion, if promotions are granted through a seniority system, usually a less competitive working environment is the consequence.

Sometimes not one particular policy but the sum of different systems influence the shared perceptions of daily practices. This is the case for the control as well as the human resources systems. As regards the former, the relevance and utility of such controls must be evaluated. Organisations characterised by a myriad of useless, bureaucratic procedures, typically develop a normative-legalistic approach. The corresponding attitudes are more concerned with the means than with the ends; the norms reign, far beyond their original purpose, the customers or the actual performance. On the other hand, a multitude of controls, if not merely bureaucratic but meaningful, may generate a tightly structured environment and thus cost-conscious practices.

3.5.4 Strategy and structure

Two further elements closely intertwined with the culture of an organisation are its structure and strategy. Both elements create or may influence a given set of practices. At the outset of an enterprise, the structural design mirrors the perception the founders have about the market and the best way to compete successfully within it. To those who are able to “read” from it, a given structure may deliver answers to questions about where management is setting priorities. In the course of time, the structure may shape the shared practices: flatter organisational hierarchies (larger span of control for the unit top manager) for example contribute to a stronger results orientation (Hofstede, 1990: 308) an organisation pursues. In

addition to the structure, other institutional arrangements influence the organisational culture. Gordon (1985: 107) has shown how the degree of vertical and horizontal interdependence creates cultures that value stability.

As for the issue of structure, the relation between strategy and culture is also characterised by mutual dependence. At the outset and with every strategic change there is a certain chance that the views held by founders or leaders act as blinkers. Once cultural practices have gained pervasiveness, they may constrain the formulation or implementation of changes in the strategy. This function has been studied at length by numerous authors (cf. Schein, 1985; Hofstede, 1991; Peters and Waterman, 1982; Beckhard and Harris, 1977) and is best exemplified by those companies with a long-standing engineering tradition that in order to remain competitive have to become market-oriented. On the other hand, once a strategy is followed for a certain amount of time, it might influence the existing practices or give shape to new ones.

The more instrumental perspectives view culture as a further variable and a potential source of competitive advantage. For them, the appropriate culture is the one that fosters practices that are in line with the organisation's aims, thus supporting and enhancing strategy as well as structure. (cf. Deal and Kennedy, 1982; Kilmann et al., 1985; Peters and Waterman, 1982). That both structure and strategy should be moulded according to the existing cultural assets makes sense from a theoretical perspective: it is, e.g., extremely difficult to follow a strong customer orientation if the prevailing practices are concerned with the ritualistic fulfilment of rules and procedures.

3.6 Influencing factors

Needless to add, several other factors might (re-) create organisational practices. One way in which the culture of an organisation is affected results from the hiring process: a given industry or specific sectors within an organisation employ people with specific professional or educational backgrounds, thus incorporating people that bear similar values, commonly apprehended during their immediate pre-professional socialisation, e.g., at the university (Hofstede et al.; 1990: 312; Trice, 1993). As will be demonstrated later, specific professions develop their own practices which, depending on the particular setting, might disseminate into other areas of the organisation beyond those occupied by the specific occupation (Martin, 1985: 154). Similarly, the values transmitted during childhood, i.e., national culture, might also partially affect the culture of an organisation (Hofstede et al., 1990: *ibid.*).

Two other processes that influence the practices shared within an organisation are corporate mergers and organisational downsizing. From a cultural perspective, downsizing is a rather understudied phenomenon, and this in spite of the fact that, as stated by Hickok (1998: 1), "the most prominent effects of downsizing will be in relation to culture change, not in relation to saved costs or short-term productivity gains". As observed by Hickok (1998: 11), "downsizing acts as an organisational destabilizer and thus as a catalyst for cultural change", probable consequences being a change in the working conditions (from "familial" towards competitive), and a shift in the employer – employee relationship (from long-term and stable towards short-term and contingent). On the other hand, merger and acquisition related activities also have a profound impact on the cultural fabric, depending on the different kinds

of synergies and postcombination outcomes (see, e.g., Buono and Bowditch, 1989; Marks and Mirvis, 1993).

Closely related to the cultural influence of occupations is the issue of technology. As stated by Trice, "Subcultures may emerge as a result of tools, machines, computers, and equipment used in work processes" (1993: 215). Moreover, the influence technology (and, more specifically, technological change) bears on culture has been cogently demonstrated by Laurila (1997). This notwithstanding, other scholars de-emphasise the importance of the employed technology and accentuate the relevance of both management and internal communications style for the successful introduction of the former (van Hasselt, 1991: 26).

For Deal and Kennedy, "A corporate culture embodies what it takes to succeed in a particular environment". According to these two authors, "the degree of risk associated with the company's activities and the speed at which companies –and their employees– get feedback on whether decisions or strategies are successful" are the main moulders of an organisational culture (Deal and Kennedy, 1982: 107). This influence was also observed by Hofstede (1990: 310): units operating in competitive markets scored pragmatic while units performing in a monopolistic situation scored normative. As a matter of fact, four of the six dimensions found in his study partly reflect the "industry culture" (Hofstede, *ibid.*). Depending on the particular context, specific constituencies can have an important impact on organisational practices. Among other scholars, Davis (1985: 138–144) explored the influence customers, competitors, government, the public and shareholders had on corporate culture.

The aforementioned examples demonstrated how the culture of organisations was influenced by forces that belong to the environment. However, the lack of such exchanges might also affect the practices shared by some agents or employees. Research conducted about the organisational culture of police units showed "the potential that isolation provides for officers to engage in deviant behaviour" (Harrison, 1998: 6).

In short, multiple factors constantly remould the practices shared by the members of an organisation. The type of leadership or the systems and procedures followed are just a few examples of how internal forces might shape an organisation's culture. However, being open systems, influence is also exerted on the cultural fabric from outside. Under some circumstances, these external forces can outweigh the internal ones; frequently they lead to the formation of subcultures. In the following sections, and after reviewing the four main characterisations cited in the literature, these subcultural formations will be analysed in detail.

3.7 Global characteristics

The concept of culture, as well as the concrete practices entrenched in an organisation, remain difficult to capture. Hence it is of importance, first and foremost for the more instrumental approaches within the field, to gauge certain global aspects of the culture to be studied or modified. Four interwoven characteristics will be shortly referred to: the culture's direction and strength and its homogeneity and stability.

3.7.1 Direction and strength

The direction is the course that culture is causing the organisation to follow. The question is whether the practices influence individual behaviour in such a way that the company's goals are accomplished or if they refrain from doing so. Though the literature cites some (trivial) examples (innovation in an environment where the culture says "don't rock the boat" (Kilmann, 1985: 5), to assess if the direction of a certain practice is the correct one seems rather difficult. As we have seen, in many organisations the goals are only vaguely (if at all) explicated. Secondly, the contribution a certain cultural trait makes towards (or from) the goals is not always univocal and unambiguous.

Closely linked to the question of direction is the issue of strength. The question in this case is whether the culture 'mildly suggests' a certain behaviour or if the employees feel a strong urge to behave according to the learned practices. The strength of a particular practice is in principle unrelated to the overall strength of the organisational culture and can be measured using the scales of some survey instruments (cf. Hofstede, 1991)

3.7.2 Homogeneity and stability

This aspect refers to the consistency of the practices and measures the extent of psychological penetration. This aspect is also related to what Peters and Waterman (1982) consider to be a "strong" or "weak" culture and has been measured by Hofstede (1991: 189) calculating the mean standard deviations to the key questions of his questionnaire. Basically what is measured are the existing variations in the perceptions. A related concept is the degree of pervasiveness (or "sociological penetration", Louis, 1985: 80). Both concepts reflect the degree in which the culture permeates the organisation. Pervasiveness however is mostly used to assess in how far the culture of a certain group has reached other areas in the organisation. Finally, the stability of the culture refers to the historical consistency of a given practice (or set of practices) over time. It indicates the degree of entrenchment of the perception of a certain practice and thus the potential resistance to change.

3.8 Subcultures

If the culture of an organisation can be formed or modified by several different sources and – as mentioned at the beginning of this chapter – culture formation is basically a group process, it is logical to expect the appearance of different subcultures within one organisation. Even more, the existence of one unique culture, a possibility we do not negate, seems to be rather the exception than the rule. "Unitary organisations evolve when all members of an organisation face roughly the same problems, when everyone communicates with almost everyone else, and when each member adopts a common set of understandings for enacting proper and consensually approved behaviour" (Van Maanen and Barley, 1985: 37). Such levels of cultural homogeneity are rather uncommon. If at all, they can be found in companies that remained small and spatially concentrated, or at the outset of any enterprise, at a time in which the influence of the founder is particularly strong and insufficient time elapsed to develop cultural diversity (Schein, 1983b, 1985). Those who write about "the" culture of an organisation or of companies having "a" culture, hereby stressing the unity of the concept, take a simplistic view, often associating it with the culture of the ruling coalition or that of the

founder. However, the number of authors taking such a stance is dwindling; all relevant, recent contributions take due note of the possibility that diverse subcultures coexist in most enterprises.

3.8.1 Sources of cultural differentiation

According to the influence exerted by the aforementioned variables, the practices a certain group shares are altered. Cultural differentiation originates in the dissimilar influence those variables have on sometimes even close units. The particular features of a subculture are that this subset of an organisation's members identify themselves as a distinct group within the organisation and have a unique perception of the daily practices.

One possible source of internal differentiation lies in the geographical dispersion of the units that form a company. Other potential cultural borders can be found along product lines, market divisions or along functional areas. Some organisations are culturally divided according to hierarchical levels or for ideological reasons. Though often the boundaries generated by these two factors overlap, this is not always the case: ideological borders are not necessarily congruent with the hierarchical design.

A further cause for cultural differentiation may be found in the used technology. When a group of employees is devoted to operate a certain line or type of machines, the probability of differentiation is increased by proximity and shared working conditions (Van Maanen and Barley, 1985; Trice, 1993). Technological innovations, when implemented in existing organisations, may create new or alter old subcultures, leading the latter to disappear or flourish. A good example of the disruptions caused by the use of new technologies has been provided by Barley in his study of radiology departments in two community hospitals after the introduction of ultrasound and CT-scanning (Barley, 1984). Lines of cultural cleavages are also frequently found in companies created as a consequence of integration, in general along areas that belonged to the units merged or acquired (Buono and Bowditch, 1989; Marks and Mirvis, 1993).

What it basically takes to build a cultural formation are a few employees that interact more frequently among each other than with the environment and share some kind of common, unique experience. Herein lies the relative ease with which such formations occur. Therefore also the disparate and numerous sources of cultural formations that can be detected even in a single unit.

3.8.2 Countercultures

The multitude of concomitant influences that form a group's culture often lead them in directions that do not follow the cultural pattern explicitly (or implicitly) pursued by the top echelons. In some situations, centripetal forces redirect sub-cultural tendencies far from the "official" pattern. In the extreme case, a subculture is at odds with the practices held by management. Nevertheless, usually counter-cultures are not the result of a gradual differentiation process that ends in a pattern opposed to the practices proposed by management. How counter-cultures emerge and evolve is not clear. For van Maanen and Barley, "poor training, inadequate rewards, resources or equipment and unrealistic

performance standards are all conditions that encourage countercultural movements” (1985: 46). Though such conditions are frequently found at the lower levels of an organisation, only seldom a counter-culture emerges there, since lower status employees lack the power, visibility and means to articulate it. Based on the study of John DeLorean’s term as division head at General Motors, Martin and Siehl concluded that “a powerful counterculture may be most likely to arise in an organisation where the dominant culture is strong,...[and]...more likely to be widely shared if articulated by a high, rather than low, status figure” (1983: 8).

A further subculture often neglected is the one that can be found at the bottom of a company. Leaving aside for a moment the concrete possibility to articulate a strong subculture, some literature presents strong evidence that the managerial perspective is not the prevailing way of thinking at the bottom of the organisation. The distrust of management or boredom created by deskilling and narrow jobs are only two of the many aspects that may engender the formation of a separate culture. In addition, differences in the social values, position and perspectives (sometimes even in dress and language) between members of the lower and higher echelons deepen the cultural gap, resulting in destructive tactics, lack of collaboration and a loss of goodwill (cf. Davis, 1985; Lipsky, 1980; Botti and Pipan, 1991). It is frequently at these lower levels of an organisation that unionism finds strong support. If, as stated by Allen, “trade union cultures, structures and procedures differ considerably from those of commercial businesses or public authorities” (1999: 3), it is plausible to expect that such subcultures, once a reasonable degree of coalescence has been reached, become counter – cultural formations.

3.9 Organisational culture and change

Can culture be changed? There is no doubt that this often posed question can be answered affirmatively. As a matter of fact, the culture of an organisation is constantly being changed. The real question then is whether the entrenched practices of an organisation can be intentionally redirected. The answer to this question depends on what one considers to be an organisational culture, i.e., it depends on the employed theoretical assumptions. In order to elucidate this question, we will refer to those two perspectives that have drawn most of the attention and simultaneously represent opposite views on the issue of cultural change.

As mentioned in the introduction (see 3.1), one of the more relevant lines of thought in the field is the symbolic approach. Authors enrolled in this stream of thinking consider that the purposive redirection of cultural practices is not feasible. According to Alvesson and Berg a true change program surfaces certain cultural elements, allowing the employee to become aware of the culture that surrounds him or her, but “by definition, a corporate culture cannot be imposed upon a collective, nor can it be controlled or manipulated at will” (1992: 168).

On the contrary, the basic idea underlying the “culture as a variable” approach is that the culture an organisation has can be quantitatively measured, changed and redirected. The empirical evidence concerning these concrete possibilities is not conclusive. As a consequence, the framework here used assumes that within certain parameters the practices of an organisation can be intentionally modified. This assumption is firstly based on the many successful experiences cited in the literature. Secondly, Hofstede’s definition of organisational culture only covers those elements that have been programmed into the employees’ mind at

the working environment. It excludes all those elements that are programmed during primary and secondary socialisation and hence are more difficult to change. Finally, there is some evidence that even deeply rooted views or convictions can be proactively transformed (cf. Festinger, 1957).

3.9.1 About the need of cultural change

Having acknowledged the possibility to redirect the practices the members of an organisation share, it is necessary to analyse when such a change is required. Basically, when changes in one or more of the forces that affect the culture of an organisation occur, a cultural adjustment may be needed. Such adjustment processes however do not occur automatically. If for example new companies enter the market, transforming it from a place where every company had an undisputed fief into a competitive environment, a new approach to business is necessary. And of course, such a change must be culturally supported. A modification of the culture may also be needed even though no external variable changed: when management perceives that there is some degree of incongruity between the pursued strategy and the practices shared by the bulk of the organisation's members, a cultural reorientation may help to reach the required fit. There is consensus – at least between the more instrumental approaches – about the need of such a fit, i.e., that the entrenched habits and perceptions must support the strategy. This need, however, leads to a multitude of related questions and issues.

Above all, it is not clear whether in cases of incongruity the strategy should be adapted or the practices realigned. "Cultural constraints determine which strategies are feasible for an organisation and which are not. For example, if a culture is strongly normative, a strategy for competing on customer service does not have much chance of success" (Hofstede, 1991: 199). Though the adjustment of the strategy for cultural reasons is based on sound theoretical arguments, we have doubts about the possibility to implement such a decision: the concept of organisational cultures might have gained a considerable degree of acceptance, but for many such a decision would still mean to "put the cart before the horse". The opposite alternative is to modify the organisation's culture to match the strategic requirements. Such a decision presupposes that it is known what specific cultural traits are required by a given strategy and what changes have to be effected.

In order to be able to detect any incongruity or mismatch between culture and strategy, the cultural requirements of the strategy to be followed must be compared against the actual practices. Such an assessment constitutes a difficult task. Little has been written about the cultural requirements of certain technologies, and even less about the conditions for a whole strategy, thus the requirements must be inferred in an heuristic way.

Even assuming that by some means a diagnosis of the cultural gap is performed, and that the decision has been made to modify the practices to fit the strategy, several issues still remain unsolved. Next to the feasibility of the cultural turnaround, information is needed about the costs involved.³ There is also no clear evidence about the time needed to introduce and firmly establish or to delete cultural elements. Other obstacles might also hinder a rigorous attempt: in some organisations, e.g., many state owned agencies or enterprises, the strategy is only vaguely defined, if at all (cf. Lipsky, 1980; Rainey, 1989; Nutt and Backoff, 1992). Under such circumstances, any cultural change program runs the risk of failure: Beer (1985)

convincingly demonstrates the inherent difficulties of a change program designed without a clear strategic outlook.

In summary, those who try to strike a balance between the pros and cons of a cultural transformation will probably finish with few clear cut answers to the demanded strategic choices. However, although the existing tools might not give a clear picture of the actual gap, through the process itself a lot of insight can be gained. Thus management might be able to decide based on educated guesses and not on mere hunches.

While the literature covers extensively the issue of planned cultural change, we believe that explicit programs intended at modifying organisational practices are the exception. In most organisational environments, cultural change occurs “naturally”, as a byproduct of the company’s inherent activities within its specific context. In some instances, whether the change is planned or not is less significant: “Whether we look at theories of ‘natural’ organisational change processes or of planned change, each of them are connected to a particular conception of organisations” (Alvesson and Berg, 1992: 164). Thus independently of the degree of explicitness, what needs to be revealed is the theoretical frame of the change agent, since it is this frame that influences the way in which the organisational reality and its modifications are conceptualised respectively implemented.

In the following sections two main issues concerning planned cultural change will be summarised: focus and agents. The review includes those aspects on which a majority of the authors of the more instrumental approaches agree and that will be needed to understand the processes here under scrutiny. Nevertheless, many concrete steps followed within such programs are often also performed by managers or leaders that are unaware of the cultural consequences of their actions. To the extent that the observations made below are also valid for the interpretation of modifications occurred under unplanned change, it is possible to understand why certain measures or actions taken by ‘culturally unaware’ managers still transform practices.

3.9.2 Focus

The general aim of any cultural transformation program is to affect the shared perceptions of daily practices (or any other type of collective cognitive structure) so that they are congruent with and support the strategy. Underlying this perspective is an assumption that a certain subgroup of members (usually the ruling coalition) possess the means to redirect the cultural objects, that is, to manipulate views and perceptions. Once the decision to alter the culture (or cultures) has been taken, it must be decided where such changes should be implemented. The literature provides examples of change strategies directed towards each of an organisation’s dimensions. Most commonly, a change program is implemented “top-down”, that is, descending on a vertical axis, with each deeper level including an increasing number of members in the process initiated by management. Nevertheless, in organisations whose members show a considerable degree of commitment even before the transformation, a “bottom-up” process is viable.⁴

Other strategies can be differentiated not according to the hierarchical level but to the centrality of the business unit where it is first implemented. Because of visibility and

credibility, Kilmann (1985: 315) advocates a strategy from the centre to the periphery, even if greater risk is involved. The opposite strategy has been illustrated by Beer (1985) and Renz (1985). If change is implemented in isolated business units the risk involved is minimised: if the program fails, the organisation as a whole is not affected. However, the question whether the experience gained in a removed unit may serve as an example that can be transferred to other units remains open. Independently of the followed strategy, the critical issue is the interaction that follows between the implementing unit and the rest of the organisation. In the words of Beer "The transformation may start at the top or the bottom, the core or the periphery. But if a reciprocal learning process does not develop, the transformation will stray from the critical path" (1985: 44).

A further characteristic of any cultural change strategy that must be evaluated before implementation regards both the timing and the degree of comprehensiveness of the change effort. The odds of successfully implementing a comprehensive set of changes within a short period of time are exceedingly slim. The case of an "all at once" strategy presented by Roitman et al. illustrates that attempting too much too fast, the company involved "sacrificed work force morale and the trust of its employees and failed to achieve the benefits it expected" (Roitman et al., 1985: 243). On the other hand, if changes are introduced too sparsely, cultural momentum and hence commitment towards the change may be lost. No definitive consensus has been reached on this issue. However, the literature allows to infer the necessity to pursue changes in an incremental way, timing the implementation of new techniques or procedures according to the advances made in the social systems (cf. Finney et al., 1985).

3.9.3 Change agents and their roles

At the end of the change process, every member of the affected unit should have modified his (or her) behaviour. Some members however, play a significant role in inducing such alterations. Borrowing from OD literature these individuals are denominated "change agents" (cf. Schein, 1969; Bennis, 1969). The literature is not concise about the selection procedure, location, or amount of designated change agents. Hofstede proposes to create a network of agents in the organisation selecting some key people at all levels. Such advice is based on the assumption that once key people start, others will follow (Hofstede, 1991: 202). Several other authors propose the formation of task-forces co-ordinated by a central committee (cf. Love et al., 1985).

The evidence from theoretical contributions as well as field studies indicate that three roles must be performed to successfully innovate an organisations practices. The most critical one is the visionary role. If change is not perceived as necessary, the first step to be taken by those who perform this role is to promote scepticism towards the present state of affairs. Simultaneously, the visionary must "articulate, as clearly and as vividly as possible, the desired future state of the organisation" (Belgard et al., 1985). For the vision to provide direction and stamina, it has to be concise, easy to understand, memorise and exciting; the visionary on its part has to have the ability to capture the imagination of members, and to awake a common vision.

The orchestrator role is primarily concerned with the implementation, administration and co-ordination of the change effort. Tasks performed within this cluster of activities comprise the

creation of communication networks and decision-making structures (Beres and Musser, 1985: 174). The legitimator role involves the display of strong commitment towards the proposed change initiative and the provision of confidence and assurance needed in situations of organisational turmoil. The legitimator must be able to help others to cope with the varying degrees of uncertainty, must be able to regain for the project those whose ideas have been ignored or put on a side-track and possess the tenacity and conviction to stick to the initiative.

Two issues seem of relevance with respect to these roles. The three different sets of behaviour are not neatly circumscribed functions attached to certain positions within the frame of a planned change effort. On the contrary, to a certain extent the three roles are performed by all change agents in systematic as well as unplanned change efforts. This notwithstanding, certain change agents, depending on their position in –or with regard to– the organisation, make extensive or even exclusive use of a single role.

3.10 A few concluding remarks

This overview allows to conclude that in spite of the advances reached so far, the field remains fragmented. Those few aspects in which agreement seems to exist actually underpin the perception that far more still remains debated and unresolved. This perception is also reinforced by the myriad of –sometimes even antithetical– approaches, perspectives or “conventions” (Alvesson and Berg, 1992: 94). In spite of these shortcomings, there is common understanding –particularly among the instrumental approaches– with regard to some issues central to the cultural transition here under study. This summary will briefly review them as they constitute the pillars on which rest the hypotheses to be presented in the following chapter.

A large number of authors analysed the link between organisational culture and business environment. They all underline the ability certain external variables have, to mould or recreate elements of a given culture. For Deal and Kennedy for example, “The business environment is the single most greatest influence in shaping a corporate culture” (1982: 13). According to these same authors, “the degree of risk associated with the company’s activities, and the speed at which companies –and their employees– get feedback on whether decisions or strategies are successful” are the two most important factors forming a culture (Deal and Kennedy, 1982: 107). If risk is considered, a radical transformation of the culture can be expected to occur at the former public railway company, since until privatisation there was no threat at all: the government always covered the company’s losses. Brooke Tunstall, writing on the break-up of American Telephone and Telegraph Company (AT&T) pointed out the serious cultural consequences of divestiture. Though AT&T was not a state owned enterprise, it operated in a monopolistic situation. As in most privatisations, this market position was eliminated through deregulation. Consequently, cultural elements had to be removed or reformed. Among the changes introduced, Brooke Tunstall cited “less hierarchical orientation, less consensus management and less avoidance of risk.” (1985). The basic cultural need for companies in such a transition phase has been precisely formulated by Robertson, Scott and Caldwell (1982): “For companies out of the regulatory treadmill, success will come from abandonment of the regulation mentality and adoption of a competitive frame of mind.”

Of utmost importance for the research here presented has been Gordons' statistically underpinned study of the link between organisational culture, industry sector and corporate performance. More specifically, the contrast between a group of utilities against a group of companies operating in a dynamic marketplace enabled to observe their dissimilar cultural profile. Among other characteristics, utilities showed a high need for stability, as reflected for example in relatively high scores on vertical and horizontal interdependence. "The most dramatic contrast between the two groups are the much lower value placed on organisational reach (an indicator of the extent to which the company sets venturesome goals and approaches its business innovatively) within utilities and the greater value placed on the use of individual initiative by the dynamic-marketplace companies" (Gordon, 1985). Considerable differences have also been detected on issues concerning compensation (particularly the relation between performance and pay) and the orientation towards action.

In brief, this chapter forwards evidence that some points of disagreement notwithstanding, there is consensus on a number of causal links and relationships that are central to the understanding of the cultural dynamics involved in any privatisation process. In the first part of the following chapter, and on the basis of these findings, the six hypotheses of the present study will be presented.

¹ As a matter of fact, the definition of Organisational culture has been adapted from the wider definition of Culture (cf. Hofstede, 1980).

² Though a majority of the literature on this particular issue treats owners, founders and leaders alike, it should be noted that the latter not necessarily are at the top of the organisation and thus lack some of the means that are available to the former. Leaders may neither belong to the ruling coalition nor share their views but create and manage a culture which is antithetical to the "official" one (cf. Martin, 1981)

³ There is a conspicuous lack of data concerning the costs involved in such endeavours. To know that such a change "costs a fortune and lasts forever" (Deal and Kennedy, 1982) is of little guidance. The few attempts to find some return-on-cultural-investments-factor (ROCI factor) have not been conclusive.

⁴ The "bottom-up" case presented by Beres and Musser (1985) clearly illustrates some critical features of this specific kind of change: a) the paradoxical demands on top management, namely to be actively involved and promote a change that forces them to relinquish power and control and b) display commitment and provide confidence in a change not proposed by him/herself, sometimes even neither understood nor desired by top management. c) a bottom-up change process can only be generated and pushed forward by committed employees.

4. Hypotheses and methodology

4.1 Introduction

In its first part, this chapter will mention those findings that allow us to expect changes in an organisational culture as a consequence of the deregulatory process. These insights permit to estimate the direction and strength of the changes caused by the exerted influences. In other words, starting from the accumulated scientific knowledge, we will construct the hypotheses to be tested. The second part of the chapter will deal with the methodological means implemented to test these hypotheses.

4.2 Postulated hypothesis

In its most basic form, the privatisation of any SOE implies one or more of the following changes: a) a change in the market situation; b) a change in the legal framework that regulates the activities of the enterprise; and c) a change in the financial flow, particularly the inability to be further funded by government. Based on the above-mentioned observations we can postulate that as a consequence of deregulation, a privatised SOE will profoundly modify both its legalistic and customer orientation, as well as the way in which control and performance is exerted respectively evaluated. The notable overlapping among these observations with the findings of Hofstede et al. (1990) led to the decision to base the hypotheses here presented on their factors. More specifically, we hypothesise that the following changes or shifts in orientation will take place:

Hypothesis 1

The privatisation of a SOE will induce a shift from a concern with means towards a concern with ends

Essentially, the privatisation of any typical SOE starts a process of debureaucratisation. One of its most important features is a change in the perception of the function of those rules and norms that until privatisation regulated the company's activities. Rules will not stand anymore above anything else (including the clients) and continue to be an end in themselves. This will happen as a consequence of a change in the way management approaches the business, from legalistic or normative towards results-oriented. While a SOE employee was punished for not fulfilling rules, independently of their intrinsic value, no one was punished for not making a better use of existing facilities, etc. Since the public purse is no longer available in order to finance economic losses, there is need for results. There is a change also on the accountability that reinforces the new orientations. In addition, perhaps for the first time managers can be measured against well defined targets.

State-owned-enterprises, particularly those with a long history and tradition, have traditionally been regarded as a "big family" in which an often explicit policy promoted the recruitment of members of the employee's family. The strong influence exerted by the particular unions have created organisations that provided their employees clubs, holiday resorts, hospitals,

Hypothesis 2

The privatisation of a SOE will induce a change in the source from where the employees derive their identity: from being centred on the organisation towards being centred on the particular job

sometimes even housing and schools. For a majority of the SOE's members, and particularly for those at the lower and middle layers, the main question was to belong to the organisation, the type of job being only of secondary relevance. Accordingly, employees derived their identity largely from the organisation as a whole. When talking to outsiders, they define themselves resorting to the company's main activity, e.g., "petrolero", "telefónico" or "ferroviario".

After privatisation many of the factors that formed or enhanced this organisation – centred perception will recede or be deleted. To begin with, in the process of deregulation the central government sold separately the assets not belonging to the core business of the SOE's (the aforementioned clubs, holiday resorts, etc.). In addition, SOE's have been downsized and afterwards divided, in order to increase the potential number of bidders. Thus, the "big family" and its tradition has been removed. The unions strength, after a peak during the populist governments in the area, ebbed away during the military regimes and was further weakened by the oncoming neoliberal governments. Two further elements point to a change in the source of identification: a) the selection procedure implemented by the new owners were mainly based on the ability and performance on the job, leaving aside any particularistic elements; and b) in varying degrees, the new companies will be composed of former state employees and people who formed their perception within the private sector, where such levels of parochialism are rather unusual.

Hypothesis 3

The privatisation of a SOE will induce a shift from a concern for people towards a concern for completing the job

The rather lax personnel policies of the SOEs in the area and their even weaker implementation has often been pointed out. The average employee of any SOE had to work fewer hours per week than his colleagues in the private sector. Each SOE had a myriad of norms regulating reasons for justified absence from the workplace; as a consequence, the actual time at work was extremely low: according to the Argentinean Ministry of Economy, absenteeism was around 20 – 25 % (FIEL, 1989: 279). The pressure to work was rather low: according to a World Bank report on Argentina's railway company, that SOE could reduce its work-force by 30 to 50 % without affecting output at all (PNUD, 1988). Needless to say, the perception of the company's employee orientation also originated in the many possibilities the company offered to their members: next to the aforementioned clubs and hospitals, the SOE

not only offered schools for the members' children but also courses for the employees to finish primary (7th grade) or secondary (12th grade) school.

This -sometimes paternalistic- employee orientation is interrupted with privatisation. Companies are sold without all the clubs and amenities; the advantages gained through labour disputes over many years (labelled "conquistas sociales") are no longer valid; employees have to work longer hours and have less free time. In addition, performance is measured and people are held accountable.

This obviously generates a shift in the perception the employees have of their working environment. They notice that their personal problems now play a less important role and that it is not a policy of the company to encompass the employees family into the organisation.

Hypothesis 4

The privatisation of a SOE will induce a shift in the orientation towards clients: from "user" to "customer"

The proverbial lack of interest in the client on part of the employees of SOE and agencies has been widely documented. That the customers of SOE are denominated "users" is certainly not a mere semantic issue but a consequence of both the absence of competitors and the security that any financial loss will be supported by the respective ministry, and hence the perception of the clients being dependent on the SOE, rather than the other way around.

Since these two elements cease to exist after privatisation, it seems plausible to expect that the perception will shift towards seeing the customer as the company's central constituency. This even holds true for the newly created private monopolies, since a) they are held accountable against a licence contract and b) customers might choose between different (quasi) monopolistic providers. While before deregulation the "user" has been confronted with the same apathy at all public monopolies (natural or not), now the customer might choose between them. In many regions, there is a real possibility to travel by plane or train or bus, or to choose between different forms of energy.

Hypothesis 5

The privatisation of a SOE will induce a change in the amount of internal structuring: from loose control towards tight control

As results from the key questions used in Hofstede's study of organisational cultures, "people in loose control units feel that no one thinks of costs, meeting times are only kept approximately, and jokes about the company are frequent. People in tight control units describe their work environment as cost-conscious, meeting times are kept punctually, and jokes about the company and / or the job are rare" (Hofstede, 1991: 191). Unfortunately there

is no data concerning SOE's about the last two key questions. On the contrary, there are plenty of indicators on the issue of cost-consciousness in public units. Many explanations for the apathic and "don't-rock-the-boat" attitude of SOE's managers have been found; in the end, such a behaviour permeates all levels of an organisation and induces a lackadaisical approach. In his study of an Indian SOE, Phatak reports of employees that "admitted that the work assigned to them could be accomplished by half as many employees and in less than half the time taken" (Aharoni, 1986: 286). Similar considerations can be found in a thorough report on Argentinean public utilities (PNUD, 1988).

Once the causes for the above-mentioned apathetic approach of management are deleted (e.g. through the elimination of the temporary nature of managerial positions), it can plausibly be expected that management's approach to costs will change, thus modifying the generalised perception. The altered emphasis on costs will certainly also be induced by the arrival of potential or actual competitors, since financial results will determine the continuity of the company's existence.

Hypothesis 6

The privatisation of a SOE will induce a change in the consistency of the culture: from homogeneity towards heterogeneity

Though many authors give the impression that an organisation has one culture, there is sufficient evidence both of a theoretical and an empirical nature that an organisation is composed of many different cultures. In the case of the SOE's, it seems that beside unit-bound cultures, formed according to their regional or professional characteristics, there is an all-encompassing cultural background they all have in common. This all encompassing culture is formed by the entrenched bureaucratic habits most –if not all– SOE's share; it originates in the same legal frameworks (esp. labour legislation) and in the analogous administrative difficulties: high management turnover, procedural sluggishness, etc.

It is this particular aspect of the culture of the SOEs that will probably be changed as a result of changes in the previously noted dimensions. Given the relatively short time that lies between the date of transfer and the second measurement, the new culture will not have been absorbed or settled. Many elements of the old culture will linger on, thus an increase in the heterogeneity can be expected.

4.3 Selection conditions for the units of analysis

In order to be able to detect cultural changes it was decided to study a SOE in which the conditions before and after privatisation would be as dissimilar as possible. To be able to determinate that specific unit, a procedure was developed that included the following criteria:

4.3.1 Property

The question of property is inextricably linked to the legal status conceded to the particular organisation. The ample definition of Public Enterprise (*Empresa Pública*) commonly used in the Argentinean literature is of little purpose for this study (cf. FIEL, 1976; Ugalde, 1984). It includes types of organisations in which the state might only be a minority shareholder (*Sociedades Anónimas*) or has only very limited administrative powers. In order to be able to draw comparisons and relevant conclusions, it was decided to circumscribe the search to those public enterprises that fitted Aharoni's more stringent definition (Aharoni, 1986: 26).

Consequently, only the following categories of public enterprises have been selected: SOEs ruled under Law nr. 13.653/49 (*Empresas del Estado*) SOEs with a specific regulation (*Empresas del Estado bajo regímenes especiales*) and finally those societies in which the state is the majority shareholder created under Law 17.318/67 (*Sociedades del Estado con participación estatal mayoritaria*).¹ In summary, before privatisation the state had to be the only or at least the largest shareholder. After privatisation, the situation had to be the opposite. Hence, of all privatised SOE's that pertained to the categories mentioned in the previous paragraph only those companies have been of interest in which ownership belonged to one –or several– private investors.

4.3.2 Age

This variable is also of crucial relevance since if too little time elapsed between the creation of the organisation and our measurement, no practice or value had the time to become entrenched and taken-for-granted. There is, however, no clear evidence of the time certain elements need to consolidate themselves and constitute an organisational culture. Based on the examples cited in the relevant literature, it was decided to set the minimum age the organisation has to have before privatisation at 30 years. Such a margin assures that the groups within the enterprise had enough time to develop a common history of problem solving and to stabilise their collective experience. Closely linked to this issue is the question about the appropriate time to conduct the survey in the private enterprise. In other words, how old should the new culture be by the time of its measurement? For obvious reasons there is not an appropriate time; suitability depends on the interests of the researcher, i.e., the phenomenon to be studied.

4.3.3 Market position

In order to find a paradigmatic example of SOE, it had to be certain that it fulfilled at least one of the following three conditions before privatisation: it had to hold a secure position as monopolist in its market; a sizeable proportion of its clients had to be "caged" customers, i.e. the clients were not free to choose between alternative means but were fully dependent on the delivered goods or services; and finally, the central government continuously undertook the payment of the losses incurred by the SOE. If this conditions were met, the existing experience indicates that any traces of competitiveness are deleted and the role of the customer is minimised.

Here again, the situation after deregulation had to be –to the extent possible– the opposite. The formal as well as actual monopoly has to be broken; clients have to have the possibility to choose between competing services or products, and the newly created organisation has to be financially independent and run the risk of bankruptcy

4.3.4 Size

Out of the myriad of alternative ratios and figures for a company's size, it was decided to select a single indicator: the number of employees. This figure offers a clear impression of the size of a SOE. Besides, it is extremely important for this study to count with a considerable work force before privatisation since only a certain proportion of these employees usually are transferred to the new organisation. In order to be able to recognise the relation between the old and the imposed culture, it was further decided to focus our search on those companies that according to the privatisation contract, would assume a large number of employees of the former SOE.

4.4 Research design

Based on the accumulated knowledge mentioned before, the assumption can be formulated that any privatisation will start to move two basic, intertwined cultural processes: one away from the entrenched bureaucratic habits and a second that leads towards the new, imposed culture of the new owners. The measurement of such cultural phenomena involves complex methodological difficulties. Culture is difficult to identify because practices or attitudes are taken for granted. On the other hand, cultural artefacts like rituals, the architectural design of an office building or uniforms, though highly visible are difficult to decipher. Following their specific interests or scientific formation, researchers have approached the phenomenon here under scrutiny in a multitude of ways. In the following section the main features of the research methodology used in this project will be described.

4.4.1 Multistrategy approach

The main objective of the methodology here proposed was to reach a balanced integration of four different means: interviews, questionnaires, the analysis of diverse documents and the direct observation at the research sites. Together, as indicated in Table 4-1, they cover three out of the four available strategies for operationalising constructs of human mental programs (Hofstede, 1980: 17).

Thus, this study employs stimulated verbal or written responses ("words") as well as deeds in order to be able to operationalise the underlying mental constructs. The bits of information gathered through the different approaches could afterwards be "triangulated" (Hofstede, 1980: 18; Schein, 1985: 135). Out of this process a cultural pattern emerges that, being composed of different types of measurements, has a relatively high degree of reliability.

Table 4-1
Methodological strategies

| Available strategies | | |
|----------------------|--------------------------------------|---|
| | stimulated | non-stimulated |
| words | [1] interviews, questionnaires | [2] analysis of documents |
| deeds | [3] laboratory and field experiments | [4] direct observation; use of available descriptive statistics |

4.4.2 Diachronic study

If a single cultural diagnosis is conducted ex-post, little can be said about the changes in practices or probable future developments. This is particularly valid for the transformation that takes place in SOE’s after privatisation, since data about the cultural reality of public utilities is scarce. Consequently, in order to trace cultural shifts a longitudinal study is needed.

The research design of this project comprises two measurements: one before the actual date of transfer to the private sector and a second one approximately a year after that date. The timing of both measurements is complicated by several factors. Ideally, the ex ante measurement would take place before the decision to privatise the company is made. Once the decision is known by the employees, a rising tide of fears, expectations and rumours sets in, partially blurring the culture’s original patterns. This is often compounded by the simultaneous implementation of rationalisation measures aimed at increasing the attractiveness of the specific enterprise to potential investors. The selection of a specific point of time once the decision is known by all members seems to be of minor relevance, an exception being periods of strong confusion or upheaval (e.g. impending layoff decisions, strikes). Results obtained during such transient periods must be validated against information sampled before the aforementioned tide sets in.

On the other hand, the selection of a specific point of time for the ex post measurement is less conditioned by sudden, external factors, the researcher having more latitude to set the actual time according to his or her specific targets. Two aspects have been balanced when setting the ex post survey at around a year after privatisation: if the survey is conducted too close to the day of transfer, cultural practices had no time to develop and strengthen. On the other hand, if too much time elapses in between, the study would loose some of its practical meaningfulness, since possible dysfunctional trends or traits would subsist undetected and correctional measures could not be developed.

4.4.3 Quasi-experimental design

The study has a “quasi experimental” (Stanley and Campbell, 1963) design: it was decided to survey a second group of employees that worked until privatisation for a SOE and were then

assumed by the new operators. For reasons of comparability, it was decided to select a unit that shared several relevant traits with the selected unit. A second group of employees belonging to another privatised unit that formed part of the original SOE was also surveyed. This control group belonged to the Nuevo Central Argentino, a unit that obviously also matches the ex post conditions set above (see Table 4-2). The fact that NCA assumed former Mitre line staff and currently operates former Mitre line services is of the utmost importance for the comparison, since according to a World Bank report (PNUD, 1988: §4.03), "each of the six lines that were united to form Ferrocarriles Argentinos have neither lost their independence nor their identity" and this more than twenty years after their merger. Consequently it seems to be relevant to employ as a control group a unit that not only belonged to the same SOE, but also to the same line.

4.5 Survey methodology

In accordance with the methodological design, the survey was conducted using four different means of investigation. Following their order of implementation, the phases have been: data collection, first round of interviews, the administration of a written, "paper and pencil" questionnaire, and finally a second round of interviews. Needless to say, the four phases have been repeated in each unit and survey.

4.5.1 Data collection

This first phase intended to build links to the unit of analysis and to gather reports and diagnosis about the former SOE and its market. Given the relevance of union activity in most SOE's, the respective unions also had to be contacted during this phase. A literature research was started in order to collect data about the organisational culture of the selected unit or similar SOE's in Argentina and Latin America. The information gathered during this introductory phase served –among other purposes– to define a research catalogue for the first round of interviews.

4.5.2 First round of interviews

The most direct way to detect cultural practices is through spoken language. Though time consuming, they remove part of the shortcomings of the "paper and pencil" measurements of phase two. This is particularly valid for the more flexible interview approaches. Thus, it was decided to employ a semi-structured, open ended interview technique based on a checklist that included nine key questions. This basic questionnaire was enhanced or complemented according to the specific type of interviewee. The four basic categories resulted from applying hierarchical (manager or non-manager) and seniority (former employees / newcomers) criteria.

The first eight questions were not formulated in a restrictive manner, thus covering all relevant issues mentioned in the relevant bibliography. The ninth question was an abridgement of the phenomenological oriented, issue-focused interview method implemented by Sackmann (1991) in her study of cultural knowledge in organisations². Following Sackmann, each interviewee was asked to mention the innovation he or she considered most important and further asked to justify his or her selection.

The material to be obtained through the interviews was regarded as a mean to assess globally the thematical validity of the issues included in the written survey and to enhance by more qualitative impressions the picture to be delivered by that quantitative approach.

This first round of interviews was complemented by a second one that took place after obtaining the preliminary results of the quantitative measurement. The purpose of this second round of interviews was to act as a mean to follow in-depth those mere hunches or more or less elaborated ideas that could be distilled from the preliminary results. In addition, they were planned for clearing eventual misunderstandings or ambiguous bits of information. Consequently, no specific questionnaire has been developed.

4.5.3 Written survey

This third phase aims to approach the culture of the SOE by means of an „paper and pencil“ survey, though many authors in the field argue that the use of written questionnaires is not a valid approach to an organisation's culture. For Sackmann for example (1991: 180), “A questionnaire approachwas considered inappropriate ...[because it]... would require many assumptions made by the researcher”. Neuberger and Kompa go even further, declaring that “Die „Stoff- und Faktenhuberei“ der quantitativen Vorgehensweisen seit geraumer Zeit keine Erkenntnisfortschritte mehr bringt. ...diese Ansätze [lassen] viele Phänomene unberücksichtigt und unerklärt” (Neuberger and Kompa, 1991: 56).

Nevertheless, this study uses such an instrument. Among other things, a written questionnaire allows to gain a representative image of the current practices within tight time and financial restrictions. All those elements that the “dictatorial constraints” of a written survey (Neuberger and Kompa, *ibid.*) might leave aside, can be discovered by the other research approaches. Above all, the accusation concerning the lack of advances brought forth by this approach can easily be rejected (cf. Aiken and Bacharach, 1979; Negandhi, 1979; Hofstede, 1980, 1990, 1998). In addition, statistically underpinned studies have the advantage that they can be easily verified by different observers (intersubjective checking).

By the time we decided to use a written survey, several questionnaires had been developed and tested. In the search for a survey that fitted our purposes, we first discarded the Kilmann Saxton Cultural Gap Survey (CGS). Above all, the four dimensions presented by the pair of authors / consultants did only cover our hypotheses in an incomplete way. Besides, it is neither clear by what means Kilmann and Saxton arrived at this four dimensions nor if they took into consideration the problem of ecological fallacy (Neuberger and Kompa, 1993, Hofstede, 1990). The survey developed by von Rosenstiel et al. (1992) has been rejected. Originally intended as a climate survey, the additional questions cover in detail some culture related issues. However, the proposed dimensions, scales and calculated mean values do not constitute a help in finding an answer to the formulated hypotheses. In addition, the length of the survey (86 questions) was considered inappropriate, especially for low-level state employees.³

A further problem posed for the study of culture was found in the particular institutional circumstances in which the survey would take place. Though neither the actual date of the survey nor that of transference was known, by the time the survey was to be held the fact that the SOE was being closed was certain. Consequently many standardised questionnaires that cover relevant dimensions (e.g., commitment, intent to stay, etc.) could not even be taken into consideration (cf. Tsui et al., 1992).

In the end, it was decided to administer an abridged version of the questionnaire used by Hofstede et al. (1990) in their survey. This condensed questionnaire, known as the Organisational Culture Module (OCM) includes those 18 questions that had shown high loadings (over 0.60) on one of the six factors extracted, and that put together represented the essence of the respective dimension (Hofstede et al., 1990: 302). Six dimensions were extracted by means of a factor analysis performed on the mean answer (of the twenty units sampled) to the 61 questions dealing with perceived practices. Each of these dimensions is formed by three questions (or items) of the aforementioned eighteen.

Dimension P1 (labelled "process vs. results-oriented") opposes a concern with means (process orientation) to a concern with goals (results orientation). According to their own perception, members of process oriented companies feel uncomfortable in unfamiliar situations, avoid taking risks, make only the least effort, and believe that each day is pretty much the same. On the contrary, people working at companies positioned at the results oriented pole of this dimension look upon their colleagues as individuals who are comfortable in unfamiliar situations, who put in maximal effort, and who believe that each day brings new challenges. These antithetical statements, presented in a 5-point Likert scale format, correspond to items 3, 8 and 18 of the OCM (see Appendix 1). As could be expected, Hofstede et al. detected e.g., companies with direct contact with clients or R&D departments at the results-oriented side, and production or mainly administrative units on the process-oriented pole (Neuijen, 1992: 176).

Dimension P2 (labelled "employee vs. job-oriented") opposes a concern for people (employee-oriented) to a concern for getting things done (job-oriented). Members of employee-oriented companies perceive that personal problems are taken into consideration, that the company assumes responsibility for the well-being of its members and their families, and that all important decisions are made by groups or committees. In job-oriented companies on the contrary, people believe that strong pressure is exerted to finish tasks, that the personal problems of the colleagues are of only secondary importance, that the company is only interested in the work the employees get done and, finally, that decisions in general are taken by individuals (items 2, 4 and 10).

Dimension P3 (labelled "parochial vs. professional") opposes units whose employees derive their identity largely from the organisation (parochial) to units in which people identify with their type of job (professional), a distinction that reflects the contrast between an internal or external frame of reference. Broadly speaking, when asked what kind of work he or she does, an employee of a parochial company will answer "I work for xy company". Members of professional companies on the contrary will answer "I work as an engineer". Employees within a professional company think that job competence was the only criterion in hiring and that the background has no influence. Moreover, they believe that a persons life is regarded as

his (or her) own business and that they are expected to think three or more years ahead. Members of parochial companies on the contrary believe that people of a certain family, class or education have bigger chances to be hired, that the organisation's norms cover the employee's behaviour at work as well as at home, and that no one thinks more than a day ahead (items 5, 9, 16). According to Neuijen (1992: 180), units with a traditional technology or employees with low educational level tended to score parochial; high tech units on the contrary are located near the professional pole.

Dimension 4 (labelled "open vs. closed system") opposes open systems to closed systems, and partially describes the communication climate of an organisation. Members of open units believe that both the organisation and its people are open and clear to newcomers and outsiders, that anyone would fit the organisation, and that new employees only need a few days to feel at home. On the contrary, members of closed units believe that both the organisation and its people are closed and secretive, that only very special people fit into it, and that new employees need more than a year to feel at home (items 6, 12, 14). As with the employee vs. job-oriented orientation of a company, the position on this dimension is influenced by the philosophy of the organisation's founder(s) or top leaders and their styles and traditions (Hofstede, 1990: 308; Neuijen, 1992: 181).

Dimension P5 (labelled "loose vs. tight control") refers to the amount of internal structuring in an organisation and is related to the way in which control is exerted within the organisation. Tight units are characterised by a strong degree of discipline and supervision. People in tight units believe that everyone is strongly aware of the costs of time and materials, that colleagues always speak seriously about the company, and that meeting times are kept punctually. Loose on the contrary implies less discipline and control. In such units, people adhere to the belief that no one thinks about the costs of time or materials, many jokes about the company are made, and that meeting times are only kept approximately (items 7, 11, 13). Hofstede et al. found that organisations delivering precision or risky products or services tended to score tight, while units with innovative or unpredictable activities tended to score on the loose control side (Hofstede, 1990: 310; Neuijen, 1992: 182).

Dimension P6 (labelled "normative vs. pragmatic") opposes pragmatic (market-driven) to normative units (bureaucratic) and to some extent evidences the degree of market orientation of the organisation. Members of pragmatic units adhere to the statement that in their organisation, major emphasis is exerted in meeting customer needs, that results are more important than following correct procedures, and that regarding ethics and honesty, a pragmatic attitude prevails. Members of normative units, on the contrary, assert that in their organisations, major emphasis is exerted on correctly following procedures, that these procedures are more important than results, and that in matters of business ethics strict standards are obeyed, even if they run counter to short-term results (items 1, 15, 17). On the pragmatic side of this dimension Neuijen found units operating in a competitive market and service industries; on the normative pole e.g., units with a monopoly position (Neuijen, 1992: 182).

Of utmost relevance for the formulation of the hypotheses and, more specifically, for the selection procedure of the research instrument, has been the pertinence of these dimensions with regard to commonly acknowledged traits of Ferrocarriles. On the basis of information

gathered before the study, this SOE could plausibly be expected to be located near one pole of most dimensions. Ferrocarriles was clearly process and employee oriented and extremely bureaucratic. Legends and facts about the numerous control and supervision instances abounded. Given the low educational level of a majority of Ferrocarriles' employees and the preponderance of the institutional history and tradition, the likelihood a parochial attitude was high.

As mentioned above (see 4.2), the coincidence between the dimensions found by Hofstede et al. (1990) and the cultural issues raised by deregulation strongly suggested to base the hypotheses on the former. This fact, together with the clear origin of the OCM and its easy administration, led –in a second step– to use this questionnaire as main qualitative instrument. In addition, only one question had to be reworded as a consequence of the imminent company transformation. In order to ensure complete equivalence, the questionnaire has been translated (and retranslated) by two independent, certified translators. To warrant full comprehension, the instrument was tested with different members of the lower and middle echelons of the FeMeSA. Fully aware that the questions were tailor-made for a particular set of organisations, we decided to use them out of their area of proven relevance. A complete version of the instrument has been included as an Appendix.

4.6 The unit of analysis selected

By the time the selection procedure was started, the second phase of privatisations was well in advance and a considerable number of sectors and enterprises already privatised or deregulated (e.g. the national air carrier, the electric sector, TV and radio stations, oil extraction, steel and petrochemical plants, etc.). In addition, it proved to be extremely difficult to gain access to some of those interesting units that remained in public hands by then.

In early 1993, more than a year after their privatisation, the first two cargo lines handed over to the private sector were running their operations at profit. According to the World Bank and some relevant sources of the international railway business (cf. Knechtel, 1993), Argentina's railway privatisation program was considered to be a model to be followed. This led the attention to the metropolitan railway system and to the suburban Mitre line in particular, since this line had not been transferred to the new owners. In February 1994 FeMeSA's Board declared its interest and agreed to support this project. In addition, it was possible to reach a similar agreement with the Nuevo Central Argentino, a private company that operates the remaining network of what formerly constituted the complete Mitre line. According to the methodological design described below, the NCA would serve as control group.

Since Ferrocarriles Argentinos as well as the two private operators matched the selection conditions, it was decided to employ the Mitre line as unit of analysis. There are, however, two additional considerations to be made. The first remark is related to FeMeSA's age: according to our selection conditions, the SOE had to be at least 30 years old. FEMESA, however, was created as an independent unit in March 1991. This notwithstanding, it was decided to go on, since the transfer from Ferrocarriles to FeMeSA was by and large a mere change in the name. Though through the creation as an independent unit FeMeSA gained some managerial latitude, the bulk of the regulations and procedures remained intact. Thus it

can be assumed that for the purposes of this study the change of the metropolitan railway system's legal status quo was of no relevance.

The second consideration is of structural nature and concerns the railways' market situation. As noted by many authors (Pigliacampo, 1995; Baumgartner, 1993), at least since the massive introduction of cars, coaches and lorries, the railway has lost its position as monopolist. The markets of the competitive means of transport being completely deregulated, the railways monopolic power actually only existed on paper. While Ferrocarriles served some distant and remote locations and thus had some "caged" customers, this was certainly not the case for FeMeSA, which operates within the densely populated area of the Buenos Aires Metropolitan Area (BAMA), a region further served by 15000 buses belonging to 250 private companies and a 44 km long subway network (World Bank, 1996). In spite of these arguments, Ferrocarriles (and FeMeSA) can be considered a public monopoly because the central government permanently financed its losses and thus to a great extent induced the disregard for the customers and their needs.

4.7 Research activities

As mentioned in the preceding section, the different survey phases were implemented in each unit. Table 4-2 states chronologically their main institutional milestones and the periods in which this research project followed activities in situ.

Table 4-2
Survey schedule

| Survey schedule | | |
|-----------------|--|----------|
| September 1989 | Deregulation Ferrocarriles Argentinos | FA ↔↔ |
| March 1991 | Creation of FeMeSA | FeMeSA |
| December 1992 | Privatisation of Mitre cargo services / NCA starts operations | ↓ NCA |
| June 1994 | Ex ante survey at FeMeSA | |
| June 1995 | Privatisation of metropolitan services / TBA starts operations | ↓ TBA |
| July 1995 | Ferrocarriles Argentinos liquidated | |
| October 1995 | FeMeSA liquidated | |
| April 1996 | Ex post survey at TBA | |
| May 1996 | Ex post survey at NCA (control group) | |

4.7.1 Data collection

The main activity during this first phase was to collect reports and diagnosis about Ferrocarriles Argentinos. Though the unit actually transferred was FeMeSA, the bulk of its practices can be expected to be rooted in Ferrocarriles' development. This notwithstanding,

special attention has been given to the staff shifts that took place since FeMeSA's formation. Of particular interest has been the information delivered by the unions. Simultaneously, the research was extended to cover some aspects of the former private railway companies that operated in Argentina before nationalisation, since some elements might have survived the period of public ownership.

Before the ex post survey was started in the private companies, similar information was requested from both TBA and NCA. Examples are the policy manuals, the company's magazine, and, of particular relevance, the labour agreements with the respective union. This data was validated against the aforementioned diagnosis and reports to determine their intrinsic value.

4.7.2 First round of interviews

In order to gain as many perspectives as possible, interviewees were selected from within and outside the organisation. Examples of the latter are World Bank consultants working on the deregulation project, a former Ferrocarriles Argentinos president, and former employees (compensated leavers). Concerning the employees, in the three companies (FeMeSA, TBA and NCA) participants were chosen following a sampling strategy that combined hierarchical level and divisionalisation. The company samples always included the company's head, 2-3 managers and between five and nine middle or lower level employees. The latter have been selected following the recommendation of previous interviewees, union representatives or the personnel head.

A total of 35 people were interviewed: 13 at FEMESA, 9 at NCA and 13 at TBA. At FeMeSA interviews were conducted with the unit's president, his main advisor, the directors of the personnel and infrastructure divisions, five departmental heads and four low level employees. At the end, the selection included interviewees from headquarters and distant locations, employees of both genders, and "old-timers" and "newcomers" alike. With the exception of the conductors (the union "suggested" their members not to participate) employees belonging to the remaining three unions participated. At NCA the president and three vice-presidents have been interviewed, among them the foreigner (in this case American) responsible for the technical operation. Two middle management and three low level employees have also been selected, always respecting to the extent possible the criteria followed at FeMeSA. Following an additional criterion, five of the nine respondents were assumed from Ferrocarriles by the new operators. At TBA, interviews were conducted with the unit's president, two advisors, the directors of the personnel and infrastructure divisions, three departmental heads and five low level employees.

The checklist covered a wide spectrum of topics, ranging from perceptions about the company in general and the Mitre line specifically, to more specific questions about cultural artifacts (as e.g., heroes, misdeeds and rituals). Each interviewee was asked to mention some demographical information, basically the data required by the last questions of the written survey. The question about the previous working experience was of particular interest since those employees that before entering Ferrocarriles had substantial experience within the private sector could trace rich comparisons between both organisations as working environments.

At the beginning of each interview the researcher presented himself and the purpose of the study, making very clear –in the case of the FeMeSA sessions– that absolutely no links existed between this interviews and others projects started by the new operators. Absolute confidentiality was assured. Each interview was tape-recorded. The interviewees were given the possibility to stop the recorder whenever they considered necessary and instructed how to do so. None of the respondents objected to tape-recording, but on a handful of opportunities the interviewees made use of the offered option and stopped the recording for a few sentences. The interviews have been conducted individually in a closed room, under exclusion of other employees or superiors. They always took place during working hours on the company's facilities near the interviewee's working place.

4.7.3 Written questionnaire

With only minor modifications the same questionnaire has been used in all three units. The modifications did not affect the 18 core questions; only the wording of certain phrases related to demographic issues were altered for the two ex-post surveys. The original version of the questionnaire has been enhanced by an introductory note stating the purposes of the study, the sponsoring university and -again- making very clear that participation was voluntary and anonymous. Given the lack of experience of most employees on how to fill a Likert type questionnaire, the second page included a brief description on how to complete it and provided an example. Respondents were allowed to ask questions; time limit was orally set at twenty minutes. The survey has been administered collectively, to homogeneous groups of respondents that belonged to the same sub-unit. The written surveys were also conducted in a closed room, under exclusion of non participating employees or superiors, and always took place during working hours on the company's facilities near the group's working place.

The main target underlying the written survey was to get a clear and quantitative impression of the perceptions of practices held by the employees. However, since their practices cannot be fully grasped unless management's practices are known, it was decided to include the upper echelons in the survey.

In order to be able to trace eventual cultural fragmentations, the three (company wide) samples were divided into sub-samples according to the potential sources of internal cultural fragmentation. The analysis started considering the departments, the type of occupation, the different locations, and finally the hierarchical level as criteria for the divisions. After the first round of interviews was held, it seemed interesting to add a fifth possible source: union membership. In the respective chapters the selected criteria and according units are described in detail (see Tables "Partition criteria").

Because of the strict divisionalisation, there is an almost absolute congruence between some of these categories. At FeMeSA for example, all LF members were conductors and worked exclusively on the train; all ASFA members were "señaleros" and worked exclusively along the track. In the FeMeSA sample both categories are thus "pure": although a guard is also on each train, they were not available for the survey; in the latter case, there are also other workers who perform their duties along the track (e.g. the gangs that change sleepers) but they do so only temporarily and have therefore not been included.

Deeper divisionalisation was discarded because the small number of respondents per subunit would have prohibited, in many cases, to draw valid conclusions. A sample covering 10% of the total population was considered to be sufficiently representative; to the extent possible, representative subsamples were obtained from all subunits.

4.8 Difficulties

In spite of the efforts conducted to circumvent foreseeable obstacles lying in its path, this study met several hindrances and restrictions. This section will analyse these difficulties and point out their consequences for the results obtained.

Without doubt, the most relevant difficulty encountered was the virtual absence of a common cultural background at FeMeSA. While making any comparison extremely difficult, it made it necessary to go back and investigate the culture of Ferrocarriles on the basis of diverse sources. In other words, the *ex ante* measurement had to be complemented by a previous diagnosis in order to make a clear longitudinal study possible. It can be argued that at that point in time another unit of analysis might have chosen. It has to be noted, however, that the unit studied was not chosen at random but was selected following stringent selection conditions among a small (and decreasing) number of state owned enterprises. In addition, most of those factors that destroyed FeMeSA's culture were also present in the other, remaining units.

Having partially solved the lack of cultural knowledge about FeMeSA restoring to a diagnosis on Ferrocarriles' common practices, two additional issues remained open. The first one was of statistical nature: though the mean scores found were characterised as having "high" levels of dispersion, it is in principle not clear where to draw the limit between "low" and "high" levels of this particular index. The decision to use the term "high" was based on other studies that, having used the same questionnaire, in general obtained lower degrees of response heterogeneity (e.g., Hofstede et al., 1990; Ybema, 1998) and on the fact that the average standard deviation nearly reached the dispersion level of a perfectly even distribution. On the other hand, this study brought forward a strong increase in response homogeneity (particularly among a selected set of "critical" items), a fact that -independently of any adjective- clearly indicates the (re)construction of common understandings and thus culture.

The second issue that had to be resolved was of practical nature: the considerable differences between the reality at FeMeSA and the one experienced at Ferrocarriles generated some difficulties for the respondents of the survey. Do the questions refer to the present situation or the time before deregulation started? Left disregarded, this small but relevant difference might have spoiled all results. To assure response consistency, it was decided (and communicated to all respondents) that the questionnaire was asking about their present situation (at FeMeSA). Nevertheless, whenever they saw particularly strong differences to the prior situation, they were encouraged to annotate it next to the respective question. Constituting a deeply seated line of cleavage, the distinction between the situation before and after the start of the deregulation process has been followed throughout the entire study.

A further weakness of this study has been generated by the decision to use as control unit an organisation that belonged to the same railway line. This decision was taken because several authors (Silverleaf, 1994; Tesoro, 1996) and many of our interviewees hold the opinion that strong line-identities and completely disparate set of attitudes characterised the members of the six original lines that formed Ferrocarriles. Neither the statistical data nor our ex post interviews backed up these assertions. In the light of this finding, it seems that the decision to use a cargo unit as a second ex post unit because of its common origin was mistaken, and that more fruitful comparisons could have been obtained if the control unit had been chosen among the five other metropolitan passenger carriers.

A third shortcoming of this study stems from the absence of organisation specific questions in the written questionnaire. As a matter of fact, only the 18 item Hofstede et al. (1990) Organisational Culture Module (OCM) has been administered. Though aware that this instrument had been tailor-made for a specific set of companies and that it was being used out of its area of proven relevance, it was decided to apply it. The reason why the OCM has not been enhanced by a number of additional questions is straightforward: lack of time; little more than a week elapsed between the arrival in Buenos Aires and the start of the written survey, which had to be conducted under such time restrictions because of the imminent transfer to the new owners. The consequences of this absence are clear: some of the items do not allow to discriminate between the situations before and after deregulation, probably because of their lack of pertinence. It has to be noted, nevertheless, that the information lost was regained through other means, as e.g., the personal interviews.

4.9 Summary

Next to the aforementioned weaknesses there were other, more common difficulties: union representatives that boycotted the survey, officers that were unwilling to co-operate, suspicious interviewees. In spite of all these restrictions, the available data allows to determine several broad but unambiguous trends. After revealing these trends for each of the units sampled in the following four chapters, the acquired knowledge will be combined in chapter 9, where the main findings are discussed and put in perspective.

¹The following categories or organizations have been excluded: Departamentos de la Administración central; Cuentas especiales; Organismos descentralizados; Sociedades de Economía mixta Ley 15349/46; Sociedades del Estado Ley 20705/73; Empresas Privadas incorporadas a la Administración del Estado; Corporaciones Interestatales; Corporación Argentina de Carnes; BANADE y CNAS.

² The oral questionnaire encompassed the following questions: a) Please mention the main three innovations since privatisation. (e.g., why was it important?; who was involved?; what has the innovation accomplished?; who or what constituted a barrier?); b) Define, characterise and contrast company goals; c) Own task: contrast degrees of responsibility, working hours, effort level, productivity, availability of tools and parts, tidiness. d) Contrast supervision levels, degrees of freedom; e) Management: contrast styles, attitude; f) Leadership & leaders; role models; heroes; g) Unionism: strength; representativeness; h) Company loyalty & identity; sense of belonging; i) Contrast newcomers with former agents; role of experience and background.

³ An updated, customized version of that same survey consisted of 104 questions. Cf. Betriebsklimaanalyse der Universität Augsburg, Prof. Dr. M. Stengel, September 1993

5. Ferrocarriles Argentinos

5.1 Introduction

The following four chapters will analyse in detail each of the units that took part in the study. The present chapter offers an overview of the Argentinean railway system in general and of Ferrocarriles Argentinos in particular. While a first section of each chapter briefly characterises the organisation's institutional development, in a second part the main cultural traits are presented and discussed.

5.2 The Argentinean railway system

5.2.1 From the beginnings until nationalisation (1857 – 1947)

The Argentinean railway system is one of the oldest in Latin America. In 1855 the construction of the first 10 km was started, which were inaugurated two years later. From then on and until nationalisation the network increased –though at an erratic pace– steadily to reach roughly 46.000 km in 1948. By the turn of the century, the main communication axis had been developed. As can be observed in other former colonial countries, the railway system's design reflects the needs of an economic model based on the exportation of agricultural products. The network is best described as a fan: the different lines all start from the interior of the country and converge on the marine ports, mainly on Buenos Aires. Links between the axes were (and still are) scarce, a feature to some extent related to the diversity of gauges.

The aforementioned deficiencies hint to a wider and deeper problem, which was the lack of an unambiguous railway policy. According to Cuccorese (1984: 8), "Argentina never had a guiding and defined policy concerning railways". Basically, the pattern actually followed oscillated between the British and the French railway development models. Since local sources of financing were scarce and mainly oriented to agriculture, private foreign capital was attracted. Funds and knowledge arrived predominantly from Britain, asking for conditions that would match the conditions in Britain or many of the newly opened markets (e.g. Australia or India). These requirements were not only met but improved: borrowing from the French model, the national or provincial government guaranteed railway investors a given return on their shares, normally between 5 and 7 %. At the same time, again following the French pattern, the national state and the province of Buenos Aires started their own railway companies, in both cases with considerable success.

The whole system developed at considerable pace. Though initiated thirty years after the first tracks were laid in Britain, in 1912 it had an extension of 31.161 km, operated by 14 independent companies. At that time, Argentina's railway network was the most developed in Latin America and the eighth world – wide. Public railway activity was particularly strong during the initial years. In 1880, the extension of public and private networks were roughly the same. In the last decades of the XIX century however, influenced by liberal streams of thought and privatisation experiences in for example Italy (Cuccorese, 1984: 77), the national state and the province of Buenos Aires transferred some lines to private owners. This notwithstanding, at least five public railway lines subsisted and even expanded their services.

After 1920 the public share of railway activity started again to increase. By the time of nationalisation, 30 % of the tracks were not in private hands.

For Argentina's economic and above all political development the railway system has been of utmost relevance. The lines opened and widened the internal frontiers and interconnected distant locations that until then were completely unexploited. Seen from a political perspective, it transformed into a country an assembly of remote and relatively independent areas. The railway companies delivered much more than a mean of transportation. For many years, all railway companies taken together were the main employer; they introduced shops and factories where until then only carts had been used. Private as well as public railway companies set up schools, technical institutes and provided housing for the families of the employees.

Based on the developments of the foregoing decades and the late diffusion of automotive transport, the railway companies were at their apogee in the '20s. Improvements are introduced in all lines, traffic figures reach unprecedented levels and the invested capital obtains consistently high returns. The crisis of 1930 brings to an end this period. The economic downturn is marked by a shortage of capital, currency exchange control and a dramatic reduction of demand. Two further factors contribute to a decline in revenues: a) during the '30s Argentina starts an extensive road construction program and b) as soon as demand decreases, the consequences of the absence of a planned design surfaces: many tracks have been laid too close, and ruinous competition characterises many markets (FIEL, 1993: 76).

5.2.2 From nationalisation to privatisation (1947 - 1991)

In 1947, in what constitutes one of the most debated historical disputes in Argentina, all foreign railway companies have been nationalised. We will not try to find out whether it was a good deal or not; what we are interested in, are some peculiarities of the transaction because – as we will see – they shed light upon one of the basic traits of FA. Following is a summary of the facts that led to the decision to nationalise the foreign railway companies.

As a consequence of World War II, Argentina's trade balance with the UK was extremely positive: by 1946, the UK owed Argentina £145 m. Since convertibility had not been re-established for transactions preceding 1947, the money was blocked. A treaty signed in 1946 allowed the government to take-over British investments in Argentina. In 1947 the eleven British railway companies were bought for £150 m. A similar agreement was closed with the French government for the (three) French railway companies then operating in Argentina (Cuccorese, 1984: 154).

What remains clear, is that Argentina had little choice than to nationalise the railway system, because its assets in London were frozen. Thus in 1948 the government incorporated more than 29000 km of tracks not as the result of some specific policy, but because of the economic situation in the UK (Cuccorese, 1984: 155). In addition, it fitted the – however vaguely defined – economic ideology then prevalent. The absence of concrete objectives characterised not only the acquisition but also the later exploitation of the network. Needless to add, this void had profound consequences on the organisation's structure and strategy. It also affected the organisational culture, a point which will be elaborated in detail further on.

Almost a month after nationalisation (March 1, 1948) an ad-hoc railway commission was created with the purpose to manage a network comprising almost 43 000 km and more than 170 000 employees. Having no defined policies, its main accomplishment has been to merge according to their geographical proximity some minor tracks to the main lines, thus building six independent units. Their English (or French) denominations were dropped and mostly renamed after Argentinean (military) heroes: General San Martín, General Belgrano, General Roca, General Urquiza, Sarmiento and Patagónicos. With the exception of the latter (which has been merged with the Roca line), the lines remained under this configuration until privatisation.

In 1950 and by decree 20 024 each line was transformed into a Public Enterprise that resorted under the Ministry of Transport. The relative independence of each line allowed them to regain some momentum: 1000 km of tracks were added, reaching the maximum length of 43958 km. In 1956 this unique decentralisation experience was interrupted and all the lines merged into one SOE (Empresa de Ferrocarriles Argentinos / EFEA) by decree 15 778 (1956). The purpose of this decree, signed by the military government that ousted Gral. Perón from power, was to centralise and thus rationalise the company's operations. They did not succeed: the separation remained intact.

In 1965 the SOE was recreated (by Law 18 360) under the denomination Ferrocarriles Argentinos. In a further attempt to streamline its activities a central organism was created that concentrated all administrative, commercial and operative functions. Again, though the intention was to rationalise and avoid redundancy, the duplication of functions as well as the indefinición of the concrete limits between the central organism and the lines persisted until 1989.

In 1970 Ferrocarriles Argentinos transported 15 b. Tonnes – Kilometres (Tkm) and 13 b. Passenger – Kilometres (Pkm). Since 1970, however, a steep decrease began; its share in both markets (i.e., cargo and passengers) on average fell from 15% (in 1970) to 8% (in 1989). The loss in the amount of transported units, a trend that can also be observed in other countries, was accelerated in this case by several dysfunctions which will be elaborated in detail further on. The financial performance reflects this difficulties: in 1973 the deficit reached \$500 m., never to be improved. In 1989 it reached \$700 m., that is, roughly 3% of the national budget or 1% of Argentina's GDP. A prognosis in which a status-quo scenario was used resulted in a deficit of \$1200 m. for 1992 (Knechtel, 1993).

In early 1991 the second round of privatisations began in Argentina. Next to SOE's from the energy sector, steel plants, the metropolitan subway, etc., the complete railway system was deregulated. Assisted by a \$ 7,1 m. "Railway Reconversion Process" loan from the World Bank, a Railway Restructuring Unit was created (Kogan, 1995; Knechtel, 1993). The government accepted the Bank's proposal of 1988, that recommended the partition of the system into three independent businesses: cargo, interurban passenger services and metropolitan services. In the case of Ferrocarriles, the privatisation took different forms. The main modus was the selling of concessions (for a period of 30, 20 or 10 years) that included the responsibility for the maintenance of all infrastructure and rolling material. Simultaneously, the government transferred some tracks to the provincial governments

(decentralisation) which had to finance their own railway system as well as decide on its future legal and ownership status. A majority of them decided to follow the central government and proceeded with privatisation (Knechtel, 1993).

The first railway subsystem that was offered for privatisation was the cargo line that connects Rosario with Bahía Blanca, bidded in 1989. On November 1st, 1991, the first 5200 km of tracks were handed over to private investors. In 1989 the metropolitan system was partly restructured as an independent business unit within Ferrocarriles Argentinos (Kogan and Kohon, 1994; Knechtel, 1993). Two years later, in March 1991, Ferrocarriles Metropolitanos Sociedad Anónima (FeMeSA) was created. FeMeSA administered a network of 885 kms. and had at the time of its creation a staff of roughly 13 000. By this mean, the metropolitan transport system was legally and technically separated from Ferrocarriles Argentinos. A schematic map of both the cargo and metropolitan grids after their transfer to private management have been included in the Addendum at the end of this chapter.

5.3 Organisational diagnosis

In the following sections a brief organisational diagnosis will be elaborated. It will point out the main weaknesses and thus help to understand both the government's decision to privatise and some of the difficulties the new operators had to tackle. A summary of Ferrocarriles' legal framework before privatisation will serve as introduction, to be followed by a description of the company's performance and an explanation of its main causes. The chapter ends with a more detailed analysis of the metropolitan subsystem.

5.3.1 Ferrocarriles' legal and institutional regulations

As a state owned enterprise that belonged to the transport sector, Ferrocarriles' performance was heavily influenced by the legal and institutional arrangements that regulated its activities. To begin with, though the national Congress had -under constitutional right- ample faculties to regulate the companies activities, it was not clear until privatisation if this power was exclusive or the national and provincial governments had concurrent rights. As mentioned before, the question remained unresolved until 1989, and was a constant source of conflict on matters of jurisdiction (FIEL, 1989).

This notwithstanding, the law 2873 (1891) and the decree 90 325 (1936) establish unambiguously a national jurisdiction on all those lines that linked the capital with one or more provinces, or crossed either provincial or national borders. This faculty of the central government was exclusive, thus implying that the provinces had not even a consultative role in the process. Only those lines that started and ended within the territory of a province were not under national jurisdiction. However, the above-mentioned law and decree, as well as many other regulations, to a considerable extent also applied to provincial lines.

The exploitation, administration, construction and maintenance of the national railway network was Ferrocarriles' exclusive function. By law 18 360 (1969), it was accorded the highest degree of financial, administrative, technical and commercial autonomy. Due to this autarchy, Ferrocarriles -at least potentially- was free to undertake all core and complementary activities considered convenient. Among other possibilities, it could a) design and approve its

own structure; b) dictate its own norms and the procedures concerning auditing, acquisitions, constructions, etc.; c) hire, promote, degrade, suspend or fire its employees, etc. Hence in principle, „law 18360/69 offers the same conditions and opportunities any private company has (FIEL, 1989: 158). Particularly regarding FA's operations, the aforementioned law authorises the company a) to propose to the government the creation, closure, or redeployment of tracks, services or stations; b) to determine schedules, frequencies, routes and the composition of trains. Only concerning tariffs and conditions of passenger services, the approval of the Transport Secretary is required. Hence Ferrocarriles activities, and particularly the freight services, were free of restrictions.

In summary, from the analysis of the institutional framework that regulates Ferrocarriles we can conclude that the company had -at least potentially- the necessary latitude and flexibility to develop a competitive commercial activity and run its operations efficiently. In the following sections Ferrocarriles' performance within this framework will be analysed.

5.4 Ferrocarriles' network

During the 50s, the Argentinean railway network had an extension of 44.000 km. As a consequence of several rationalisation experiences implemented by both military and civilian governments, some 10.000 km have been deleted. By 1989, less than 5% of the remaining 34 000 km were lines with double or multiple tracks, and only half percent were electrified. One of the network's most salient feature is the diversity of tracks (Knechtel, 1993; Roccatagliata, 1987). The first line was constructed with materials originally intended for the Crimean war (1853 - 1856). Hence its gauge has a width of 1676 mm (5'6). While roughly 57% of the network has this „wide“ gauge, 33% are of „narrow“ or metric gauge (1 m). Though the diversity has been inherited, there has been no serious attempt to unify the system, as can be observed in Table 5-1.

Table 5-1
Gauge diversity

| Gauge | distance (mm) | 1912 (in %) | 1989 (in %) |
|---------------|---------------|-------------|-------------|
| wide | 1676 | 62 | 57 |
| mean / normal | 1435 | 8 | 8 |
| narrow | 1000 | 30 | 33 |
| industrial | 750 | 0 | 2 |

This diversity originates two main type of problems: the mean gauge for example has no direct access to the port of Buenos Aires, thus forcing to either transfer the goods or to change boogies, both time consuming and costly activities. On the other hand, traction and rolling material, particularly locomotives, are not easily interchangeable.

5.4.1 Ferrocarriles' tracks

One of the main difficulties that affected the railway's operation was the deficient state of the infrastructure as a consequence of insufficient conservation and renovation and the wrong administration of maintenance expenditure. This shortcomings have many negative consequences; since maximum velocity and the maximal load per axle have to be reduced, transport capacity diminishes. In 1989, the conditions of 25 % of the tracks only allow speeds of 40 km/h or less (FIEL, 1989: 171).

The state of tracks have deteriorated constantly over the past decades. While in 1970 48,7% of the network was in either "regular" (meaning just acceptable) or poor condition, this figure increased to 55 % by 1989 (Knechtel, 1993).

The chronically insufficient maintenance and improvement of tracks on one hand reflects the endemic financial shortcomings of the enterprise. On the other hand, however, it is possible to observe situations of severe mismanagement: there is no policy that gives priority to specific lines according to their density or potential. A case in point: of the 81 km renewed in 1987, 12 % belonged to the metropolitan system and 51 % to the secondary network (FIEL, 1989).

5.4.2 Ferrocarriles' rolling material

In addition to the four gauges, Ferrocarriles used five different traction technologies (diesel and steam locomotives, and three disparate electrical systems). Obviously, the different „basic“ technology employed made any transfer between lines an extremely costly or impossible endeavour. The differences also increase costs, since they require more specialised personnel and spare parts stocks. This situation is exemplified in Table 5-2 that describes the technologies used within the system of the Buenos Aires Metropolitan Area network.

Table 5-2
Technologies used in the BAMA network¹

| Line | Roca | Mitre | San Martín | Sarmiento | Urquiza | Belgrano | Total |
|--------------------|------|-------|------------|-----------|---------|----------|-------|
| Technology / Gauge | | | | | | | |
| Electric lines | | | | | | | |
| 25Kv AC / wide | 89 | | | | | | 89 |
| 800V AC / wide | | 121 | | 105 | | | 226 |
| 600V AC / mean | | | | | 51 | | 51 |
| Non-electric lines | | | | | | | |
| Diesel / wide | 382 | 253 | 125 | 172 | | | 932 |
| Diesel / narrow | | | | | | 245 | 245 |
| Total | 471 | 374 | 125 | 277 | 51 | 245 | 1543 |

¹ Length in Kms.

Insufficient maintenance and improvement also affected the rolling material. The disponibility index (the relation between the number of units in working conditions and the total fleet) varies widely according to the vehicles considered (locomotives, wagons, cars). The disponibility of diesel locomotives for example has never been above 75 %, though under normal operating and maintenance conditions it should lie around 90 % (USA 91 %, France 92 %, Mexico 85 %, Paquistan 87 %) (FIEL, 1989). This index also shows a steep decay from 1980 on; in 1989 only 50 % of the locomotives, were in good condition (Knechtel, 1993). The more intensive the use of the rolling material, the higher is the efficiency, since the capital costs are divided by an increasing number of transported units. Hence Ferrocarriles' attitude concerning this index also evidences serious management negligence. In freight operations, each wagon run –during 1982-1985– an extremely low yearly average of 15 600 km (Australia 38 000 km; USA 32 000 km). The lowest disponibility index (and the oldest fleet, with the highest concentration of locomotives of more than 21 years) pertains to the wide gauge network, though these lines perform the traffic with the highest profitability (they transport 90 % of the grains transported by Ferrocarriles). The disponibility index of wagons slightly improved (to around 74 %), as a result of the reduction of the fleet (from 61225 in 1976 to 34258 in 1987), and, hence, of the fleet's mean age (Ferrocarriles, 1990).

5.4.3 Ferrocarriles' maintenance

The chronic unavailability of rolling material substantially reduces the offer of services. The main reason behind the low levels of availability is related to the accumulation of deferred maintenance as a consequence of the insufficient activity of Ferrocarriles own repair shops. The Sindicatura General de Empresas Públicas (SiGEP) has detected the following problems: “discontinuity, disorder and lack of trustworthiness of the materials and spare parts purchase system; absence of a diagnosis defining what tasks can actually and potentially be performed in the company's repair shops; excessive number of different brands and series; high number of non-periodic, unplanned interventions; deficient programming and coordination of activities” (FIEL, 1989).

5.4.4 Ferrocarriles' quality of service

The quality of service is measured by the absolute regularity index (punctual trains / programmed trains) and the relative regularity index (punctual trains / run trains). The deficient service is reflected in Table 5-3.

Table 5-3
Relative regularity indices

| Suburban electric | Suburban diesel | Interurban (express) | Interurban (Regular) | Freight (express) | Freight (regular) |
|-------------------|-----------------|----------------------|----------------------|-------------------|-------------------|
| 86 | 74 | 44 | 76 | 40 | 23 |

All data for 1987 (Ferrocarriles, 1990)

The situation is particularly poor for the express services, in which 56% of the run trains did not arrive on time and even worse for the freight services, in which 60 respectively 77% of the trains were late. In 1988, the last year for which data was available, every tenth train of the metropolitan system was cancelled and every fifth arrived at least 5 minutes behind schedule (Source: FA). The degradation of the service is directly related to the aforementioned shortcomings in the infrastructure (the explain 50% of the indices). There are, however, many other causes, among them the unavailability of personnel, lack of fuel, etc.

5.4.5 Ferrocarriles' traffic levels

With only minor exceptions, Ferrocarriles' share in the passenger as well as cargo markets has been constantly decreasing for the last three decades. The driving forces behind these losses were (Knechtel, 1993; Ferrocarriles, 1990):

- the inability of Ferrocarriles' management to adapt to an increasingly competitive environment caused by the advent of new means of transport (automobile and later air transport).
- deficiencies in the administration of the enterprise
- scarce investments
- imperfect allocation of the available financial resources

Table 5-4 summarises the evolution of demand of FA measured in freight units and passengers as well as in traffic units.

Table 5-4
Ferrocarriles Argentinos traffic (1965 - 1989)

| | Freight | | Interurban | | Suburban | | Total TU |
|----------|--------------------------|-----------------------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|----------|
| | tn (10 ⁶) | tn-km (10 ⁹) | passenger (10 ⁶) | pass.-km (10 ⁹) | passenger (10 ⁶) | pass.-km (10 ⁹) | |
| Mean | | | | | | | |
| 1965-'70 | 20,8 | 13,2 | 43,9 | 5,8 | 430,2 | 8,5 | 27,5 |
| 1971-'75 | 18,8 | 12,3 | 29,0 | 5,8 | 391,1 | 7,5 | 25,7 |
| 1976-'80 | 17,9 | 10,5 | 14,7 | 4,6 | 383,3 | 8,0 | 23,2 |
| 1981-'86 | 16,8 | 10,5 | 10,3 | 4,3 | 303,8 | 6,5 | 21,5 |
| 1987-'89 | 13,5 | 7,9 | 12,5 | 5,3 | 339,9 | 7,1 | 20,4 |

The negative trend shown in Table 5-4 continued until privatisation. The yearly figures for the last three year period were the lowest of the series or near the lowest levels, according to the type of market. Of particular interest is the reduction of freight transport: the level in the years before privatisation was roughly 35 % lower than in 1965-'70 (Source: FA). The reduction of the market share is even more notorious if a comparison is traced with years in which the automobile as a mean of transport was weak. At the end of the '30s, for example, 75 % of all freight was transported by railway operators; in 1987-'89 the share is lower than 10 % (FIEL, 1989: 179). For the transport of grains, which constitute about 50 % of the transported freight, Ferrocarriles has lost an enormous market share to private automotor transport. While FA

transports approximately 25 % of all the grains bound to marine ports, this same figure amounts to 40 % in the USA, 90 % for Australia and 98 % for Canada (Ferrocarriles, 1990).

The passenger traffic shows two distinctive patterns. While the suburban traffic has remained fairly stable both in passengers and passengers - km, the interurban traffics have lost, after 1976, more than 50 % of their passengers when compared to the previous period and 67 % in relation to the quinquennium starting in 1965. From 1983 until privatisation there was some increase in the number of interurban passengers transported. Nevertheless, this trend points to an incorrect assignment of Ferrocarriles' marketing strategies, since the noticeable increment of the interurban passenger – km index was gained offering services on secondary routes, thus diverting scarce resources (as e.g. locomotives) from the genuinely profitable routes (PNUD, 1988).

5.5 Ferrocarriles' poor performance: an explanation

The ample freedom given to the company by the legislators back in 1969 has never been exploited. To a certain degree, this has been management own's fault, a point which will be elaborated in detail further on. The main restrictions, however, can be traced back to dysfunctional institutional or normative elements.

5.5.1 The legal jungle

To begin with, though law 18360 / 69 has been approved, many of its operational bylaws have neither been explicitated nor formally enacted. This void forced administrators and policy makers to look for guidance in decree 90 325 (Reglamento General de Ferrocarriles) which dates from 1936. However, the company never made use of this legal "gray areas".

A second source of legal restrictions has historical roots. At the beginning, railways had little or no competitors, thus having quasi monopolic power. Thus early on, some regulations have been imposed in order that the companies did not abuse their monopolic situation. Examples of such regulations are the controls on prices and tariffs or the obligation to run unprofitable lines. Some decades later, the business environment changed radically: some railway lines competed between themselves and, in addition, automobiles began to lure customers and freight away from the railways (PNUD, 1988; Roccatagliata, 1987). The restrictions, nevertheless, remained, and from the first year of nationalisation the system had to be financed by the central government. It has to be noted that this process has also taken place in many other countries, in principle unrelated to whether the companies were private or public.

The third source of restrictions is rooted in the numerous links that bind the company with agencies belonging to the central public bureaucracy. An analysis performed by FIEL (1989) discovered that the number of agencies Argentinean SOE's had to deal with in their daily operations almost reached 200.¹ The sheer number of links is a clear indicator of the legal web that trapped any SOE: the system's main feature were the superposition of controls and the duplicity of evaluations.

The last –and main– source of restrictions is rooted in the bundle of regulations that affect all Argentinean SOE's. They are located in the legal frame that link the company with the

regulating bodies: The regulations can take diverse forms and denominations, according to their provenance: laws (Congress), decrees (Central government), resolutions (Ministries, Secretaries, and Undersecretaries). In addition, there are informal forms of regulation – customs and long-established habits– that also affect the company's performance. In the following section, examples will be given that illustrate the weight of the aforementioned deficiencies.

5.5.2 Ferrocarriles' poor performance: external control

According to the law, the Accounting Tribunal (Tribunal de Cuentas de la Nación) controls the SOE in all legal, economic, and financial issues. On the other hand, the General Accountancy (Contaduría General de la Nación) is allowed to control all those public units that receive funds from the Treasury. In addition, the Office of the Administrative Investigations Prosecutor (Fiscalía Nacional de Investigaciones Administrativas) may by itself start to investigate the administrative behaviour of public agents. The General Syndicate of Public Enterprises (Sindicatura General de Empresas Públicas) performs the external control of the largest SOEs.

There clearly was a high degree of control duplicity (FIEL, 1989; 1993). However, the actual control is weak or non-existent because a) the needed information is scarce and –if available– of poor quality, and b) the multitude of sectional regulations, exemptions, external regulations, etc. makes it difficult to identify or proof individual responsibility of public managers. Historically, the inefficiency of the legal dispositions has been countered with additional layers of regulations. All these attempts have proved to be futile, giving too much preponderance to the formal aspects of decision processes. This feature also generated a rather conservative approach to management, where inaction was praised and innovativeness eventually punished, two features characteristic for the central administration but completely ill-suited for the operation of a SOE.

5.5.3 Ferrocarriles' poor performance: purchase policies

As mentioned before, many aspects of the SOE's daily operations are regulated by sectorial norms and procedures. The adverse consequences of this policy are particularly notorious in the case of Ferrocarriles' purchasing practices.

In a extremely inflationary environment that constantly modifies the relative prices of goods and services, the annual national budget and the corresponding action plan of Ferrocarriles are of little use. This void has been filled by a multitude of disperse norms issued by the central government that limit, forbid or redirect the SOE's purchase and contract decisional process. This situation is compounded by Ferrocarriles' dual dependency. As a public organism, it has to observe the public sector norms, in this case the Accountability law (Ley de Contabilidad), the Public Works law (ley de Obras Públicas) and the Administrative Procedure law (Ley de Procedimientos Administrativos). On the other hand, by law 18360 / 69, private law regulates its relationship with the markets. To find out the valid regulation has proved extremely difficult; the relation between both systems shows many voids and open contradictions (FIEL, 1989).

In more general terms, the decision process can be described as highly bureaucratised: there is an emphasis on the administrative procedure, leaving disregarded considerations about opportunity and optimisation. The bureaucratisation also generates serious deficiencies in the analysis of suppliers, the anticipation of needs, and the flexible management of stocks.

Since the implementation of the “sound principles” of public purchase (publicity, competition fostering and equal treatment of all suppliers) included in the valid law are often time consuming, three purchase mechanisms have been employed next to the public invitation for tenders: private call for tenders, price competition and direct contracting (FIEL, 1989: 143). It is noteworthy that a SOE is only allowed to contract directly if a) the purchase is of limited amount, b) the purchase must remain secret, c) out of unexpected circumstances, reasons of urgency exist and d) the supplier is another state unit.

While point d) is a clear case of protection of public activities that vulnerates the principle of equal treatment, point c) has been frequently abused of. In many instances, the “urgency” has been the result of improvisation in the buying process, of erroneous planning or stocks mismanagement. Table 5-5 states the percentage of purchases for each mechanism.

Table 5-5
Total purchases by employed mechanism

| Public call | Private call | Price competition | Direct contract |
|-------------|--------------|-------------------|-----------------|
| 15% | 3% | 1% | 81% |

Data for 1986; Source: Presidencia de la Nacion, Secretaría Legal y Técnica

In summary, the valid regulations generated a lack of transparency of the purchase procedures and simultaneously allowed the perpetuation of a selected group of providers. Collusive behaviour and inflated prices have been the consequences.

5.5.4 Ferrocarriles’ poor performance: tariffs and services

A further obstacle to performance has been the Central governments’ influence on prices and tariffs. Particularly for the interurban and metropolitan services, tariffs have been set following social or electoral considerations, disregarding operative and infrastructure costs (FIEL, 1989; 1993). Basically, the wider policy followed by the central economic authorities was to employ Ferrocarriles’ tariffs (as well as the rest of the public prices) as an instrument of their macroeconomic policy, thus severely damaging the SOE’s financial performance.

In addition, the central authorities have in general been reluctant to discontinue unprofitable services (i.e., those services whose income does not cover the operation plus the capital costs of the rolling material employed). On the other hand, the central authorities have not implemented the specific subsidies (stipulated by law) to adequately compensate Ferrocarriles for running unprofitable services. Analogous considerations can be made about the length of the network.

5.5.5 Ferrocarriles' poor performance: transport policy

It is the central authorities duty (specifically of the Transport Secretary) to develop a sectorial policy that coordinates the activities of the different means of transportation, particularly those of the railway and automobile transport. Nevertheless, the market of road transportation, and above all of freight, is free of restrictions. There are no barriers to entrance or exit, and there is complete pricing liberty. Hence the State's tutorial function should have been concentrated on reaching a situation in which each mean (air, waterways, rail, road and pipe transport) internalises the long term economic costs it generates.

In this respect, the governments activity has been disappointing. A closer look at the conditions of competitiveness of the railway and the road transport reveals that the authorities not only did nothing to harmonise the market, but actually damaged Ferrocarriles (Roccatagliata, 1987; Ferrocarriles, 1990): the domestic prices of oil derivatives (gas oil and diesel oil) have been set below their production costs, to the benefit of truck and bus companies. It has also been unable to design a policy that forces the road transport to undertake the payment of the infrastructure's costs or to enforce the norms intended at preserving it. As a matter of fact, heavy trucks are the main source of road deterioration. A 30 tn truck damages the road as 70.000 cars do; however, the fiscal system that finances road construction and maintenance does not take due note of this fact and taxes similarly cars and trucks, thus allowing low freight fares and uneven competition.

5.5.6 Ferrocarriles' poor performance: subsidy policies

Almost without exceptions, in all countries the central government has to subsidise the railway companies. Different methodologies and techniques have been developed to set the optimal level of subsidy. Sometimes the target is to maximise the passenger-miles (e.g. London) for a given budget; in other cases specific „social fares“ are determined according to the route and market. Leaving aside the specific techniques, they all have in common that they set targets to the companies' management. On the accomplishment of these targets depends not only the level of subsidy but also the appraisal of managements' performance.

Contrasting these efforts to link the subsidy with an economic cost-benefit analysis, the Argentinean government always assisted Ferrocarriles through a “general subsidy”. The amounts transferred are not linked to a certain service (e.g. passengers) but given globally. There is no stable rule regulating the amount (it is discussed yearly by the intervening Ministries and Ferrocarriles) and ultimately depends on the possibilities of the National Treasure. Obviously this mechanism does little to improve the productivity or efficiency of Ferrocarriles' management.

5.5.7 Ferrocarriles' poor performance: the administrative systems

The last section offered a brief view of the exogenous restrictions that hindered Ferrocarriles' performance. Though focused on the metasystemic hindrances, some specific situations (e.g. the erroneous priorities of track and rolling material maintenance tasks) clearly reveal that to a certain extent Ferrocarriles poor performance can be traced back to managerial ineptitude or negligence. The following lines are focused on hindrances not directly related to exogenous

regulations, that is, the main endogenous sources of organisational inefficiency will be analysed.

The wrong allocation of priorities in traffic, maintenance or stock decisions all find their origin in poorly designed or non-existent administrative systems. Paradoxically, though innumerable internal norms exist, it is extremely difficult to find flow-charts that establish a specific decisional sequence. Thus, there are regulations in abundance, but the current decisional process is not standardised, generating decisions based on the collected experience of prior situations (ILO, 1994). As further consequence of this lack of standardisation is the perpetuation of the file (*expediente*) as the main administrative instrument (Felcman, 1987).

5.5.8 Ferrocarriles' poor performance: planning and control systems

Between 1989 and the date of transfer, the planning unit was lacking a specific assignment and basically idle. However, the situation before 1989 was not radically different (see, e.g., BIRF, 1988): its main task was to prepare the yearly budget according to the requirements of the central economic authorities. Thus, all planning activities were reduced to the ritualistic accomplishment of the budgetary process, further characterised by its incrementalism. To a certain degree, this was coherent with the actual relevance of the budget: until 1990, the National Budget (*Presupuesto Nacional*) was approved almost without exception shortly before (and some times even after) the end of the respective period of validity.

Void of any substantive targets, the emphasis did not rest upon the accomplishment of ends but on the accomplishment of means. Consequently, a control system was established (and permanently enhanced) that verified their legality. Since the norms regulate instrumental aspects and the targets are either vaguely or not at all defined, nobody controls if targets are reached, and wide organisational sectors concentrate their efforts in controlling the proper use of regulations of unknown utility.

5.5.9 Ferrocarriles' poor performance: information systems

Though some areas are computerised, the bulk of the work is done by hand. On the other hand, the different systems are only partially linked, thus further decreasing the overall efficiency. In general terms, the information that reaches management is outdated and of poor quality. Case in point: it was not possible to obtain a list with the number of employees distributed by gender or age; after two weeks a computer printed form was delivered, with the actual data typed in.

5.6 HRM at Ferrocarriles

In order to grasp the employees' reality and the sources of the organisational culture, it is necessary to take a closer look at those issues concerning the human resources. On the other hand, as the analysis will reveal, these issues are a paradigmatic example of both the internal limitations and external hindrances, thus making a detailed analysis even more fruitful.

5.6.1 Staff number

From 1853 until the early 30's, the number of employees rose constantly. As soon as competition grew too strong, reducing profitability, and the network's expansion slowed down, for the first time the number of employees was reduced. By the time of nationalisation, the railway system employed 173.000 employees. Eleven years later, having added just 1100 km to the system, 44.000 employees were incorporated, reaching a peak of roughly 220.000 in 1959. In the period 1965 – 1969 the average staff was 163.000, further reduced to an average of 142.700 during 1970 – 1977. From 1978 on a systematic and relevant staff reduction takes place. After some expansion in 1983 and 1984, when 10.000 agents were again incorporated, from 1985 and until privatisation the staff was constantly reduced (Knechtel, 1993; ILO, 1994).

5.6.2 Productivity indices

After 1978, and mainly as a consequence of a personnel reduction, there was a significant increase in the traffic units per agent: while the average for 1970 – 1977 was 177.000, this figure increased by 26 % to 225.500 TU per agent in 1978 – 1984. In the years before privatisation, due to the reduction in traffic, the number of traffic units per agent oscillated around 210.000, a low figure compared to French or American railways, where this index is higher than 600.000. Since staff reductions have been greater than network reduction, there has also been an increase in the number of track km per agent (1950: 4,3 agents per track km, 1970: 3,4 1990: 2,5).

Direct comparisons between Europe or North America and the Argentinean companies are not very meaningful because one is not considering "like with like" in neither technical nor operating terms. Nevertheless, the significant gap between productivity in the three areas is worth further analysis in order to find some paths to improvement. In 1992, Swedish State Railways (SJ) headed the European productivity table with 986.000 TU per employees. The six Japanese passenger railways averaged 1.3 m. TU per agent, while the United State's Class I railways achieved an average of 7.2 m. TU per agent. Best practice in the U.S. was achieved by Burlington Northern (the foreign management partner of Trenes de Buenos Aires), with 11 m. TU per employee, roughly twenty times better than the major European railways of France or Germany (Knutton, 1994).

To some extent, these differences are due to the stronger passenger orientation of some railways (which demands more staff), to shorter freight hauls (particularly in Europe), or technical backwardness. However, as mentioned by Knutton (1994: 1), it is an inescapable fact "that in the United States, about 20 % of the world's railway traffic is handled by only 2 % of the world's railway workers".

5.6.3 Staff characteristics

The distribution of staff, according to common criteria, was unbalanced. The staff's main feature was its high average age, particularly in the operative functions. This trend was the consequence of a) the imposition -by the central authorities- of a prohibition to hire new agents (congelamiento de vacantes) from 1983 on and b) the high unemployment rate that

characterises the Argentinean labour market since deregulation, offers little chances to those that take advantage of the voluntary retirement programs (*retiro voluntario*) that offer an enhanced indemnification package. This mechanism, originally intended at the older population of Ferrocarriles backfired, luring away those young and relatively educated agents that had good chances in the labour market. From 1986 to 1989 the average age increased from 43,5 to over 50 years. A further imbalance concerns the staff's educational level: in 1987, less than 10 % had finished secondary school. Only 2 % had earned an university degree, and these were strongly concentrated in Buenos Aires.

5.6.4 Absenteeism

As for all Argentinean SOEs, from 1982 on the absenteeism rate increased constantly. The main causes behind this trend were a) an increase in union struggle b) absenteeism through illness (this cause almost doubled from 1983 to 1987) and c) vacations (as a consequence of high average of seniority, since hiring was restricted). Ferrocarriles mean absenteeism rate increased from 13,9 % (1982) to 17,1 % (1989). These official figures are rather low; during our interviews the actual rate for the decade before privatisation was estimated at 30 %, a figure in line with the findings of the PNUD (1988) and Knechtel (1993: 486).

As a matter of fact, absenteeism was a covert form of remuneration; the losses in the real salary, a consequences of inflation and restrictive macroeconomic policies, were compensated through non-monetary advantages. These "fringe benefits" may take the form of a reduction in the number of workable days (absenteeism) or a reduction in the number of hours in which work is performed (without a reduction of remuneration). According to the PNUD (1988) Ferrocarriles' agents averaged 3 hours of productive work per day.

To grasp the real magnitude of the problem, FIEL (1989) has drawn a comparison with the private sector (average absenteeism 11 %). Computing an average absenteeism value of 24 % for Ferrocarriles (based on the PNUD 1988 inform), there still is a gap of 13 points (all data 1987). At that time, FA had a staff of roughly 97.000 agents, averaging an income of \$5700 per year. Thus, if absenteeism would be in line with the private sector, the staff could be reduced by 12.610 agents, saving approximately \$72 m. per year (10 % of Ferrocarriles' average yearly deficit).

Though the absenteeism rate of 24% is high, the labour agreement (*Convención Colectiva de Trabajo, CCT*) between Ferrocarriles and its four unions allowed an even higher rate. Simply adding some of the free days for vacations (between 17 and 35 according to seniority), illness (up to three months), mourning a relative (up to 6 days), exams (up to 28 days), marriage (6 days), moving (up to 6 days) or to donor blood (one day), an agent could easily exceed 75 days (30 % of 250 yearly working days).

5.6.5 Remuneration

The main problem when trying to analyse Ferrocarriles' remuneration policy is the notorious lack of transparency. The basic salary (*salario básico*) sometimes represents less than 50% of individual income. The rest is composed of a multitude of different items called "additional" for overtime, incentives, educational degrees, etc. but always related to the basic salary. The

number and magnitude of the additional has varied over the last decades. Basically, they are a mean to get round the remunerative restrictions imposed by the central economic authorities (FIEL, 1993). Some of these additional were created as a mean to tie pay to performance. Nevertheless, more sooner than later they developed into fixed complements, thus loosing their motivational power. In addition, when a loss in real income is compensated -even for the upper echelons- by paying overtime not actually performed, any remaining link between remuneration and results is further weakened and morale eroded.

There was a tendency –fostered by the central economic authorities– to reduce both the income levels for all agents and the income differentials between the less and more qualified staff. The first trend made it extremely difficult to attract or retain qualified resources. The second trend, i.e., the narrowing of the income pyramid (“achatamiento de la pirámide salarial”), had pernicious consequences upon management’s morale and induced lower level management to refrain from positions with additional responsibility.

In Ferrocarriles, as in all other Argentinean SOEs, there were no incentive mechanisms, for management and non-management alike. These mechanisms had been expressly forbidden by some labour agreements (FIEL, 1989). Management’s wages were set by the central economic authorities and, since its creation, by the Directorio de Empresas Públicas (DEP). This faculty had been often used, setting maximum incomes, establishing the percentage of expenses, defining incompatibilities, etc.. These policies, nevertheless, were always valid for all SOEs, and made no distinction concerning the particular situation of Ferrocarriles (or any other SOE) or the productivity of its management.

5.6.6 Tenure

From a strictly legal point of view, Ferrocarriles’ agents had no security of tenure (estabilidad del empleado público). Nevertheless, the unions have succeeded in extending this benefit, in principle only valid for the agents working for the central administration (art. 14/2, of the Argentinean national Constitution of 1853), to the agents of all SOEs. Thus, a de facto tenure was granted.

5.6.7 Further education and training

Ferrocarriles’ management never perceived the further education and training of the staff as a priority. As a consequence, there were no concrete training policies. Some introductory courses for train conductors were offered, but coordinated by the union (with financial assistance from the company). However, following a traditional, socially oriented pattern (“School of the Nation”), the company offered its employees the possibility to finish primary or secondary education in the company’s own schools.

Because of its monopolic situation, the disregard of further education and training activities had particular pernicious consequences for Ferrocarriles: for many of the company’s jobs (e.g. locomotive mechanics, etc.), there was no alternative pool of qualified resources. Since the only alternative for such tasks was the formation of new cadres, and this duty had only been accomplished to a very low extent, specific areas were chronically understaffed.

Diverse dysfunctional regulations had generated the poor performance of Ferrocarriles' staff. In order to understand the situation at FA it is necessary to consider that labour regulations in Argentina have a pyramidal design, and that it is impossible to abrogate a norm established at the different levels (FIEL, 1987: 94). In other words, since there was no trade-off between the different regulations, there was no room for negotiation. Acts, Conventions or any other kind of regulation made by a legislative body could only establish benefits that enhanced those established elsewhere. Moreover, because of the aforementioned pyramidal design and the fact that the negotiation had always the character of a claim, later presented as "social conquests", the norms developed into a rigid, inflexible and cumulative body of regulations.

A further hindrance to a rational management of personnel has been the influence exerted since the 40's by the central economic authorities on the labour market, generating strong alterations of real wages. Salaries had frequently been used as a mean of macroeconomic policies, sometimes as "anchor" variable during stabilisation programmes (forcing them to lower levels) or as an expansive variable during programs of "induced reactivation" (FIEL, 1987; 1993). In addition, salaries were regulated through various commissions that had to approve the modifications proposed by the company. In a high inflation environment this procedure often generated delays, forcing the company to pay covert increases using legal loopholes (e.g. "errores de liquidación"). Other forms of influence have been the aforementioned prohibition to incorporate new agents, the norms concerning the damming of public resources (contención del gasto público) that restrict the number of allowed overtime hours, or the promotion of agents independently of the need of their qualifications.

Of relevance for Argentinean SOEs in general, and at Ferrocarriles in particular, has been their longstanding tradition of strong unionism. La Fraternidad, the largest of Ferrocarriles' four unions, was created in 1887. Fostered and strengthened above all by the previous peronist governments, the union's power covered all areas of the company and was particularly intense in personnel matters. They counted with vast resources, financed by their ownership of the employee's mutual funds (Obra Social) and contributions of the company and the agents (membership was mandatory). To a great extent, their power also derived from the fact that agents aligned with it not only because they were their representatives, but because while management has always been transitory (on average, Ferrocarriles had a new president every tenth month) the unions presence was permanent.

Of course many of the aforementioned aspects were heavily interrelated and compounded by external factors. The relatively high average age of Ferrocarriles employees for example, was further increased by their unwillingness to retire before the maximum age (65 years). Thus the low level of pensions, the staff reductions by means of poorly designed voluntary retirement programs and the restrictions to hire new agents drastically increased the average age of Ferrocarriles' population (PNUD, 1988; FIEL, 1987). As a consequence, the capacity to assimilate new technologies or to accept modifications of routines was reduced. In addition, costs per agent soared as a consequence of more vacation and illness licences, as well as diverse other fringe benefits. The abovementioned traits strongly suggested the reduced capacity left for Ferrocarriles' management to optimise the use of human resources.

5.7 Conclusion

As the preceding sections have revealed, while there were strong hindrances to an efficient performance from the environment, Ferrocarriles management did little to widen its margin of liberty or, even worse, fully exploit the degrees of freedom it actually owned. According to the PNUD report (1988), "Ferrocarriles management [was] "schizophrenic" concerning its relationship with the central economic authorities. Ferrocarriles wishes more "autonomy" and is able to clearly define the damage caused by the present situation. At the same time, Ferrocarriles is afraid to change because its administration is aware that many of its current practices are irrational and that a change will mean a reduction of employment and status. A further, strong obstacle to change is the independency of the six lines that were merged into present Ferrocarriles. These six lines have not given up their identity, and the unions have zealously retained their independency in order to hinder the job rationalisation a fusion would imply".

5.8 A cultural diagnosis

This section constitutes the first comprehensive effort to survey Ferrocarriles culture. Such an effort is necessary in order to be able to trace the alterations of the railways company's culture and understand the condition depicted by the quantitative analysis performed at FeMeSA. The ex-ante cultural situation forces to take an historical perspective since it can be assumed to be inextricably linked to three recurring themes: a glorious past, a slow institutional decay, and finally a never-ending agony that began with the first rumours about a forthcoming privatisation and finished the day the unit was handed over to the private concessionaires.

Though hard evidence is scarce, it seems likely that some kind of common cultural understanding existed at Ferrocarriles, common views that can be summarised in a number of overarching themes. It is too venturesome to elaborate about the culture of each individual railway company before they were amalgamated and simultaneously nationalised in 1948. The excellent reputation of the English and French railway companies however was inherited by the new, public owners. The newly created Ferrocarriles was a company members were proud to work for, among other reasons because at that time the railways had had extremely important social and political roles, and both the employees and the public were aware of these functions.

The extolling of the past is a recurring theme in a vast majority of the interviews and the main source of myths. Many of the latter begin with "During the English epoch...", referring to the period between the foundation of the railway companies and the departure or retirement of the last British managers and supervisors some years after nationalisation. Since at that time it was possible to start working at the age of fourteen, some employees hired in the forties were still working for FeMeSA. Beautiful examples of such myths are the often heard statements that "During the English epoch, every mother wanted her daughters to marry railway workers" or that "During the English epoch, the guys working for the railway always had the best chicks". This economic prosperity and the associated financial trustworthiness appear, in rich variation, in other myths.

Even though -as seen before- no clear policies emanated from the central government after nationalisation, those working within Ferrocarriles had a clear notion of where to lead the company. As accounted by some interviewees (often talking about their fathers' views), "they all agreed that the network had to be expanded, and that more and more modern rolling material had to be incorporated". As noted by Tesoro (1996) there we find the roots of Ferrocarriles "hard ware oriented" (as opposed to customer oriented) culture. The analysis of former organigrams performed by this same scholar point into the same direction: engineering units were consistently given structural priority over e.g., financial departments, not to mention customer needs.

There were other overarching themes: there was a company-wide belief that passenger trains had to be given priority over cargo trains. This common understanding, to some extent fostered by politicians turned SOE presidents, led to severe losses in the until then profitable cargo business. In the end, after it stopped to be able to cross-subsidise the passenger services, the cargo business started to loose money itself. Another widely shared perception was that Ferrocarriles was an exclusively male domain. Only well after 1950 a sizeable number of female personnel entered the organisation, but even then always restricted to clerical duties. By the time of privatisation less than 3 % of the employees were female. Also commonly held was the belief that Ferrocarriles was a "great family". And indeed it was: some of our interviewees were the third generation of railway workers. Employees proudly mentioned that they were "sons of railwaymen" (*hijo de ferroviario*). Clubs founded by the British companies, mismanaged by Ferrocarriles and finally left in the hands of the unions provided ample opportunity for interaction after working hours and the formation of many so-called "railway couples".

5.9 Ferrocarriles subcultures

Of course, a company with more than 100 thousand employees covering an area roughly the size of Europe provided many lines of cleavage along which subcultures flourished. The main cultural division seems to have been formed on the basis of the six lines that formed the network (PNUD, 1987; FIEL, 1989). The roots of these subcultures can be found in the different (British or French) companies that made up each line. Other sources could be the highly diverse and often extremely distant geographical locations served and the employment of disparate technologies. The main reason however can be found in the strict compartmentalisation fostered by the unions. The identification with own one's line developed attitudes that ran counter to efficiency. The lines reciprocally accused each other of improper handling of locs and wagons. Thus, rolling material was not exchanged even where possible technically. As a result, when additional wagons were needed at harvest time by a line running to the east, they stood idle in the north.

Within each line, the main subcultural divisions were also fostered by the unions. Considering some peculiarities of Ferrocarriles, it seems plausible that the affiliation to a particular union could be a source of cultural diversity. Historically, the Argentinean SOEs have been a fiefdom of the respective union leaders. In the case of Ferrocarriles Argentinos, the power of the unions has been extremely high. As mentioned before, affiliation was mandatory; employees were obliged to deduct a certain percent of their income to the union, which included money for the health insurance and pension funds.

Each union worked out a particular labour agreement (CCT) for their members. Thus, the work conditions were dissimilar not only for technical reasons. Ferrocarriles was structured following occupational patterns, thus reinforcing the importance of the individual profession and affiliation. Due to the aforementioned power of the unions, this divisions grew to insurmountable barriers: when the engineers were on strike, the output of the work shops was halted because even in the marshalling yard only the engineers were allowed to shunt. This strictness was compounded by the inborn tendency of state-owned bureaucracies to specify exhaustively the individual tasks.

From the comments of our interviewees two groups of members can be differentiated: the engineers and the switch operators. The former are perceived -and , to some lesser extent, perceive themselves- as an élite within the unit. They have been characterised as "the company's eye" (*el ojo de la empresa*), because of their power to control: while guiding the train, they are able to observe irregularities along the track. If for example a barrier at a level cross remained open or a station platform was unduly swept, the conductors were obliged to mention it at the terminus. Other workers illustrated their differentiated perceptions pointing out the difference of the workplaces: while those working along the track stand outdoors under sometimes extreme meteorological conditions, the engineers pass by at high speed nearly two meters above them. In addition, the engineers are the only group to which consistent instruction is given. This group has developed (or perhaps is the only one that still maintain) a high esteem for their own profession; in part, this is caused by the responsibility borne, the immediacy of their task and the believe that their chances of being admitted by the new owners are high.

The second group of employees that could be differentiated were the switch operators. Even though according to our statistical analysis they have the most differentiated and (internally) consistent perceptions, they are not perceived as different by most of the others. As a matter of fact, while the conductors and their role were often mentioned during our interviews, the switch operators seemed to play only a marginal role. If the engineers were the "visible head" of the company, here we find the invisible one. The switch operators work in groups of up to four persons in isolated towers near the network's junctions. According to our interviewees, the importance of their work has been consistently underrated. The time pressure and amount of responsibility under which decisions must be made are extreme and similar to the working conditions of air traffic controllers (Kerns et al., 1997; Wickens et al., 1997). At the same time, the technical assistance is poor: they receive outdated time schedules, must deal with many exceptions (e.g., deleted or belated trains), scarcely illuminated tracks and frequently have to operate manually purely mechanical or electro-mechanical devices. As many of them noted, they are the ones who bear real responsibility: "We are the actual engine drivers; the guy on the train is a simple accelerator".

5.10 Sources of cultural weakness

The previous evidence suggests that from the start, diverse subcultures coexisted within Ferrocarriles. Nevertheless, the simultaneous presence of diverse subcultures should not be interpreted as a sign of weakness. In principle, if the overarching themes do not contradict the narrower, e.g., professional perceptions and both are in line with the policies and requirements

set by the organization's upper echelons, these cultural layers may complement or even enhance one another. Such cultural synergies could strengthen a company's position.

The historical evidence collected, particularly the orally transmitted stories, suggest that at least during the aforementioned "English epoch" a number of common understandings supported and enhanced the companies missions. On the other hand, this was probably not the case during Ferrocarriles' last years and certainly not at FeMeSA. As indicated by our statistical analysis, neither company-wide themes nor specific subcultural groups proved to be statistically significant. The question then is to find the reasons and point in time when the - once strong- culture started to erode and became fragmented and weak.

Broadly speaking, the weak culture encountered at FeMeSA was inherited from Ferrocarriles and was the outcome of a managerial void. This void was generated by the endless succession of short-lived presidencies. As a consequence, neither leadership nor any explicit and clear message has been provided from the upper echelons. The ephemeral character of the successive presidencies inhibited the formation of any cultural message that permeated the organisation in any relevant way. To some extent, this void was filled by the unions. However, the political transformations both at a national and international level eroded the union's power base, creating a second void. Leaving for later the union's role in the process of cultural fragmentation, we will focus now on the formal power holders' inability to (re)direct Ferrocarriles' shared perceptions.

5.10.1 Absence of leadership

Leaders play a vital role in shaping an organisational culture. For diverse reasons, Ferrocarriles lacked such role models. The discontinuity in the company's presidency is striking: in 35 years (from 1955 to 1989), there have been 41 different presidents; only one of them (J.C.de Marchi) remained in office for (little) more than three years (MOSP, 1995). After deregulation began, the situation did not change. Almost nobody, leaving aside some of the employees working at headquarters, knew the name of the current president and, of course, they neither saw him nor any other president during their time at the company. Not surprisingly the only president remembered by many members was the one who held this position the longest time.

5.10.2 Absence of strategies

It is extremely difficult to build a strong culture in an organisation with unclear or, even worse, non-existent strategies. At Ferrocarriles there neither was visible leadership nor explicitly defined policies or strategies applied in a consistent manner. The problem arising from the weakness of the planning units within the company was compounded by the institutional disarray which surrounded Ferrocarriles. By different administrative means, the railways' policies were formulated from a bundle of external agencies. In many of them, the discontinuity of top management was also a usual pattern. The Secretaría de Obras Públicas for example, the secretariat Ferrocarriles depended from, changed in the aforementioned period its jurisdiction seven times (MOSP, 1995).

5.10.3 Mismanagement

Was the often heard lament about the impossibility to redirect the organisation (“our feet and hands are tied”) a reality or a myth? The answer to this question requires a profound analysis of the legal framework that coordinated the relations among the main stakeholders of Ferrocarriles, an analysis that exceeds by far the limits of the present investigation. However, there is evidence that some decisional latitude has been left unexploited and, accordingly, the cited image of the manager trapped in shackles may have been the base of a self-fulfilling prophecy.

The unit's poor performance can be traced back to three main sources: a) endogenous, b) concerning the relationship between the unit and the institutions that regulate it and c) exogenous. Starting in reversed order, it is clear that if, for example, inflation runs at a daily rate of 1 % and you are not free to increase transportation rates, the financial performance will be weak at best.

This problem leads us to the second source of performance restrictions; the most important constraints have their origin in the thicket of laws, procedures and assorted decrees that emanated from the institutional bodies that regulated Ferrocarriles. Clear examples of hindrances to sound management practices are the procedures that regulate acquisitions (in particular the “Compre Argentino”), tariff and income policy. By law (Ley 18360/69) the company had the same conditions and opportunities any private enterprise has. Nevertheless, there has been a progressive pruning of these liberties (FIEL, 1987). As a result, the degrees of freedom of this company (and of many other SOEs) were very similar to the degrees of freedom of units pertaining to the central public administration.

Though constricted, there are some areas in which the prerogatives of Ferrocarriles had been left intact. Everything strictly concerned with the commercial exploitation (e.g. deployment, closing or modifications of tracks; frequency, routes, times and composition of services) could be decided without any external approval. The only exception to this rule was the approval of the time schedule for passenger trains, which must be issued by the Transport Secretary. Paradoxically, between 1965-70 and 1981-86 Ferrocarriles lost twice more cargo [tn./km.] than passengers [pass./km.] units (FIEL, 1987).

In trying to find an answer to the question posed above, we might say that the myth of the shackled manager is not unfounded. Nevertheless, many commercial opportunities have been left unattended or mismanaged. In any case, the actual managerial possibilities were much wider than perceived.

5.10.4 Labour regulations

As has often been noted, the systems that regulate payment, promotions and other issues directed at the human resources have a dual purpose. While guiding in an immediate way the members' behaviour, they also function as signals. To the educated observer, these signals express the do's and don'ts and the general policy regarding the company's personnel. For the average Ferrocarriles employee it was difficult to interpret (to “read”) the messages sent by

the systems. This was the result of the many regulating sources that affected often contradictory policies.

From a long-term perspective, the employees did not see a clear pattern concerning the overall income policy. From 1940 on, and more frequently since 1970, the salaries have been used by the Ministry of Economy as an anchor, keeping them at a low level when stabilisation was the target or as a mean to expand demand during periods of induced expansion. In other words, the money pocketed depended less on one's own or the company's performance and more on the government's macroeconomic policy (FIEL, 1993).

Also as a consequence of state-level economic policies, there was a trend to "flatten" the salaries' pyramid. This had obvious motivational consequences for the upper echelons, and simultaneously affected the base of the organisation. These consequences are an interesting example of how macroeconomic policies might form the employees shared perceptions of daily practices. In order to retain their managers, at Ferrocarriles (and virtually all other Argentinean SOEs) it was common to pay "extra hours" not performed. Since this fact was known to everybody in the company, the management's "ethic" –and thus its authority– were seriously undermined.

The remuneration structure had lost its ability to provide incentives. Financial rewards for additional working hours not actually performed, regulations that prohibit to tie payment to results, the common practice of the salary "hook-up" (*enganche salarial*), by which the salaries have been automatically adjusted according to the rise conceded to another (usually very powerful, in terms of their bargaining leverage) public unit: these are only examples of a long list of items that generated the absence of clarity and any relation with productivity or performance.

There were also only extremely limited ways to punish deviant behaviour; though stability of tenure is not explicitly mentioned in either one of the four labour agreements (CCT), the unions succeeded in extending this constitutional right for the civil servants to the employees of this SOE. Any punishment required a preliminary written inquiry (*sumario administrativo*) and had to be negotiated with the union officials. As noted before, the main criterion for promotion was tenure.

In summary, the different systems built a non-consistent array of regulations that averted any comprehensive and efficient personnel management. Out of this mess, even an educated eye can "read" little. What employees mostly perceived, as detected through the interviews, was that any kind of individual effort remained unrewarded, that "you had to kill someone in order to get fired", and that hard-workers and sluggards earned the same and advanced at equal speed.

5.11 Cultural negligence

One reason that clearly affected the development of a culture was the underutilisation of symbols. Rites and ceremonies that are commonplace in every organisation of comparable size have not been exploited. Paradigmatic in this respect is the fact that in an organisation proud of the stability of tenure offered, not even to those members that celebrate 40 years

within the company some kind of recognition was granted. Even worse: in 1983 it was decided that employees celebrating their 20, 25 and 30 years of service would be awarded a medal in recognition of his or her services. A year later, citing austerity measures, this "costly" (sic) initiative was interrupted, never to be resumed (Res. MOSP 1104/83, 2439/84).

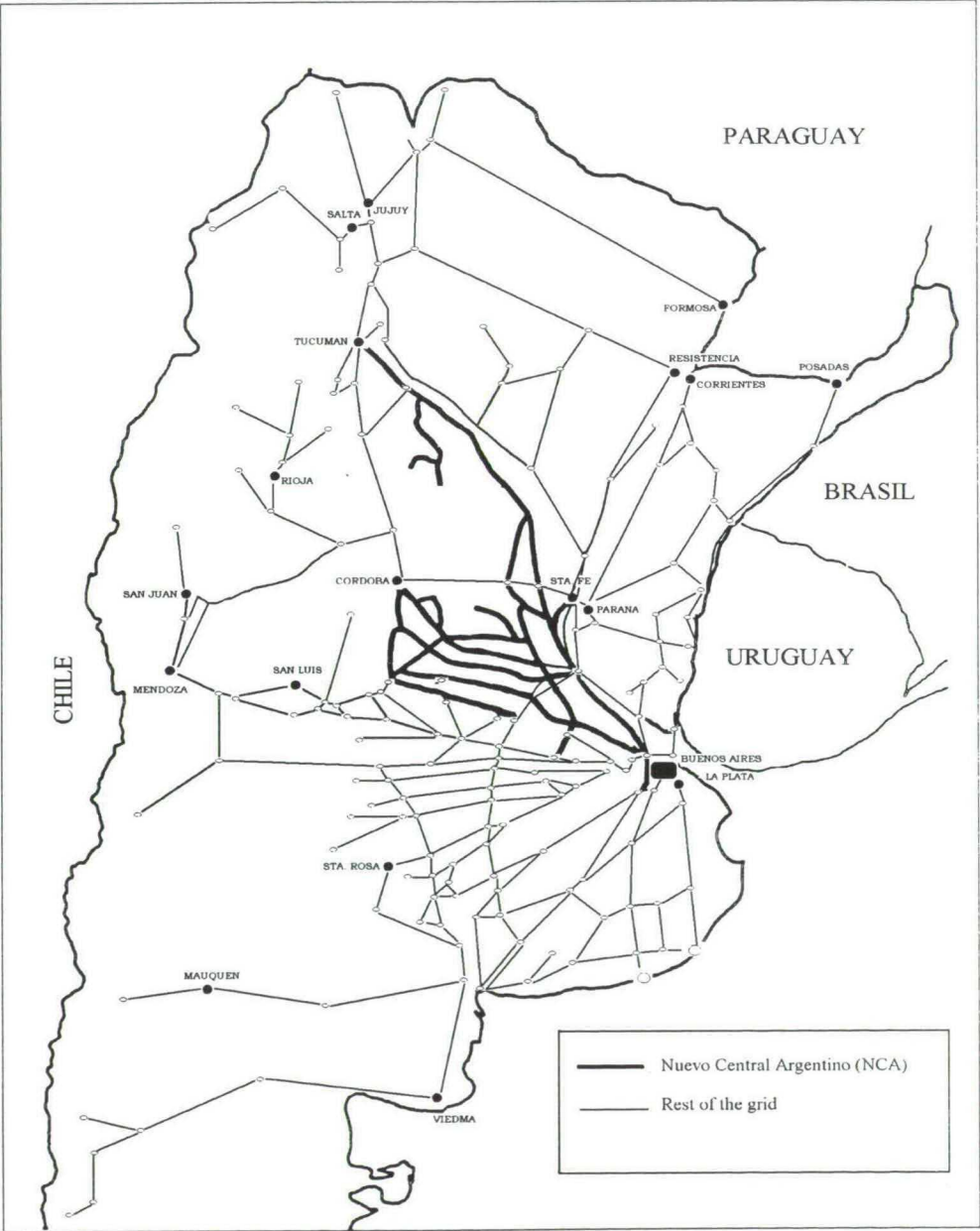
To some extent, the void left by the upper echelons' mismanagement and the institutional restrictions was filled by the unions. As mentioned before, at least from the first Perón government onwards, and fostered by his populist policies, state controlled unions conquered key positions and power within Ferrocarriles. It was at that time that Raúl Melgarejo, a union activist, became the company's president (1949-1950). Rapidly succeeding presidencies led Ferrocarriles' employees to side with what became the only institution to represent continuity. However, as a consequence of military interventions and non-peronist governments, their previously gained force was subsequently considerably reduced. Unions regained some momentum during the third presidency of Perón (and his wife Isabel Martínez), from 1973 until the military coup in March 1976. During the following years union activity was forbidden, and many activists persecuted, forced into exile or -in some cases- disappeared.

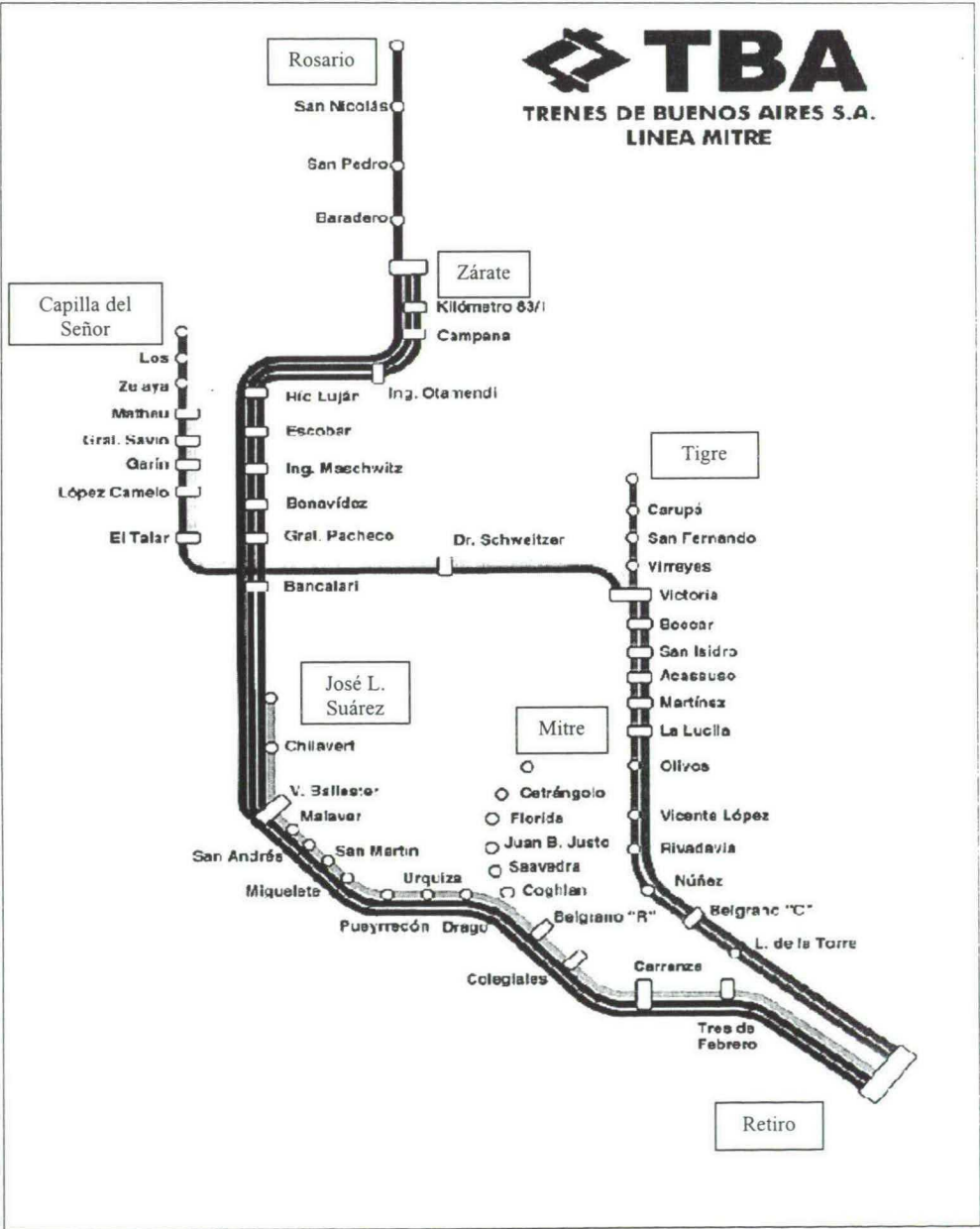
After the reinstallation of a democratic government in 1983 union activism started again, but cadres had to be reorganised, key activists were missing, and rumours of wide spread corruption generated a feeling of distrust towards unions in general. The unions' high expectations after the peronist party regained power in 1989 were truncated after President Menem announced his neoliberal program and the intention to privatise Ferrocarriles. Menem's economic U-turn forced union activist to reposition themselves. Unions leaders (and followers) were divided and started to cluster around some conservative hard-liners and more modern, pro-government leaders. A strike against the privatisation plans organised by the former found many followers but ended up in a disaster: after ten weeks without suburban passenger services the central government did not give in to any of the union's demands. This defeat marked the watershed of union activism within Ferrocarriles. Union officials fell in absolute discredit and were blamed for a wide array of organisational deficiencies; they started to be considered as traitors that either supported or witnessed inactively the company's sell-out.

In summary: union power decreased progressively during the eighties, and was totally defeated after the ill-fated attempt to halt the privatisation plans. The (to some extent counter-) cultural forces that filled the void left by management slowly decayed. It is probably this second absence that further weakened Ferrocarriles culture and led to the situation of anomia that characterised FeMeSA, as will be analysed in the following chapter.

¹ To qualify, the organisms had to be an unavoidable step for one or more of the SOE's activities and, though not necessarily influencing directly the SOE's policies, play a specific administrative or control function. The units related to most SOEs were (in hierarchical order): 7 ministries, 25 "Secretarías", 46 "Subsecretarías", 100 "Direcciones" and 9 intersectorial commissions.

Argentinean Railway Grid





6. Ferrocarriles Metropolitanos SA

6.1 Introduction

As mentioned before, in 1989 FA was segmented into several units in accordance with two criteria: line and market. Based on the latter, the former national railway company was divided into its three main business activities, namely cargo transport as well as interurban and metropolitan passenger transport. While the cargo sector was again subdivided following the existing lines and subsequently privatised, the interurban passenger service was, almost without exceptions, either deleted or transferred to the provincial governments.

Two years after the initial reorganisation took place, what basically remained were the urban sections of the six lines that together formed the Buenos Aires metropolitan railway system. Since 1989 this sub-system run, partly restructured, as an independent business unit, providing transportation to the urban market located in and around Buenos Aires. In early 1991, and with the more immediate purpose to dismantle a protracted strike of railway employees, the government decided to form a legally independent entity that would be transferred to the private sector that same year (Felder, 1994: 64). In March 1991 Ferrocarriles Metropolitanos Sociedad Anónima (FeMeSA) was created; at its outset it administered a network of 885 kms and had a staff of 13 000. FeMeSA's existence was rather ephemeral: between January 1st, 1994 and May 1995 the unit was again subdivided and handed over to private operators.

6.2 The metropolitan railway system in brief

As can be deduced from the previous lines, the reality of FeMeSA can only be understood by restoring to Ferrocarriles institutional development. Nevertheless, and in order to provide a more specific view of the market it served, the following section will briefly outline and put in perspective Ferrocarriles' (only) suburban railway system. Ferrocarriles Argentinos' metropolitan services covered Buenos Aires and its surroundings, a vast market of roughly 11 million people. As indicated in Table 6-1, the system is rather large and comparable to those of other relevant cities. With an average of 620 passengers-kilometres per person and year, the level of utilisation is also in line with the figures of the other cities. However, the metropolitan system runs considerable less trains and more than doubles the average number

Table 6-1
Metropolitan services (1990)

| | B. Aires | Sydney | N. York | London |
|---------------------|----------|--------|---------|--------|
| population (m.) | 11.5 | 5.5 | 10 | 18 |
| pass.-kms. (pp & a) | 620 | 676 | 579 | 802 |
| track length (km) | 1400 | 1400 | 1800 | 7300 |
| trains-kms. (pp) | 2.5 | 27.6 | 14.6 | 7.7 |
| pass./train | 246 | 24 | 40 | 104 |

Source: Kohon, 1992

of passengers per train of London. Though these factors should make the system economically more efficient than comparable systems, income has eroded mainly because tariffs have increased slower than inflation.

Buenos Aires has a need of 12 million daily rides. Ferrocarriles' market share has decreased consistently over the last forty years. In 1989, the metropolitan railway system transported 268,7 m. passengers and required additional resources of \$475,7 m.. Thus, each transported passenger was subsidised with \$1,77 (Kohon, 1992: 7)¹. Before privatisation, it satisfied approximately 10% of demand. To a certain extent the switch to other means (particularly buses, with a share of 80%) can be related to their intrinsic advantages. Nevertheless, the decay of service enhanced the loss of customers: in 1988, 11,1% of the trains were deleted and 21,1% suffered delays (Kohon, 1992; Kogan, 1994).

6.3 A cultural diagnosis

In June 1994, a year before the company was finally transferred into private hands, a written survey was conducted at FeMeSA. At that time, 2021 employees were working for the company. Excluded from the sample has been the intermediate, supervisory level. According to data delivered by FeMeSA, approximately 10% of the company's population belonged to this third level. Its members do not configure a homogenous group that could be characterised as "middle management". As a matter of fact, as a consequence of restrictions on promotions and wage increases, this level includes employees with disparate activities and responsibilities that have been granted a covert salary increase while performing their usual task. It seemed of little interest to treat them as a separate entity and it was decided to exclude them from the sample, thus concentrating efforts on the remaining two levels. As a consequence, the population to be sampled amounted to 1838 employees, unequally distributed among the five existing "Departamentos".

6.3.1 A first overview

The most striking characteristic of the survey conducted at FeMeSA is the wide dispersion of the individual answers to the different questions. Table 6-2 presents the rounded-up means and dispersion of all items when considering the whole sample (the actual scores can be found in the Addendum at the end of this chapter).

Table 6-2
Means and dispersion FeMeSA

| item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| mean | 3,3 | 2,3 | 2,4 | 2,6 | 2,6 | 2,8 | 2,6 | 3,9 | 2,1 | 4,2 | 3,5 | 3,1 | 3,7 | 3,2 | 3,2 | 3,2 | 2,8 | 3,0 |
| dispers. | 1,5 | 1,1 | 1,4 | 1,6 | 1,3 | 1,5 | 1,5 | 1,3 | 1,3 | 1,2 | 1,2 | 1,4 | 1,3 | 1,4 | 1,5 | 1,5 | 1,3 | 1,5 |

As we might observe, the standard deviation of no question is below 1,1 and the mean dispersion approximately 1,4. In order to grasp the full meaning of these values, it should be

noted that on the 5 point Likert type scale used, if the answers would be perfectly even distributed, the dispersion would be slightly above 1,41.

The obtained scores allow three basic interpretations. A first explanation is that the questions were unintelligible to the respondents and therefore were answered at random. Second, high levels of dispersion could be the result of aggregating disparate groups. In this case, the obtained scores could be concealing the presence of several subcultural groups. Finally, standard deviations which are consistently above 1,1 could indicate the existence of a heterogeneous group, i.e. the absence of shared practices.

We do not preclude the possibility that the questions were unintelligible to the respondents, but there are some strong arguments to counter it. The dispersion of the answers of the 24 managers surveyed, for example, (min. = 0,92; max. = 1,72; mean = 1,36) is well above 1,1 and it seems improbable that even this subsample found the questions unintelligible. Concerning the second alternative explanation, the -often union lead- strict compartmentalisation increased the likelihood of subcultural entities. Finally, there is a bundle of reasons -mainly rooted in what FeMeSA inherited from FA- that could have caused the fragmentation of the culture by the time of our survey.

The crucial importance of the high levels of dispersion regarding the meaningfulness of the data, forces to analyse in further detail this particular issue. More specifically, we are interested to find out if disparate subcultural groupings emerge from the data, or if the absence of shared understandings is a pervasive organisational feature.

6.3.2 Hofstede's organisational practices

As mentioned before, this study employed Hofstede's Organisational Culture Module (OCM) as sampling instrument. Therefore, a comparison with the dimensions they obtained in their multicompany, binational analysis is of utmost relevance (cf. Hofstede et al., 1990). A first step in this direction is to detect if FeMeSA's data -with regard to cultural practices- reveals a structure similar to the one found by Hofstede et al. in their study. In other words, could we expect to find triads of specific questions strongly linked among themselves but at the same time unrelated to the other 15 questions?

According to Hofstede et al., the dimensions were formed by the following triads of questions: P1 = (3, 8, 18); P2 = (2, 4, 10); P3 = (5, 9, 16); P4 = (6, 12, 14); P5 = (7, 11, 13), and P6 = (1, 15, 17). As can be observed in the corresponding table in the Addendum at the end of this chapter, FeMeSA's correlation matrix indicates that Hofstede's dimensions are not present in this sample. Out of the expected 18 strong links, not a single significant correlation coefficient has been detected. Even more, in some cases the questions expected to build a triad are practically unrelated.² Consequently, we will in the remainder of this chapter analyse the data on an item-by-item basis.

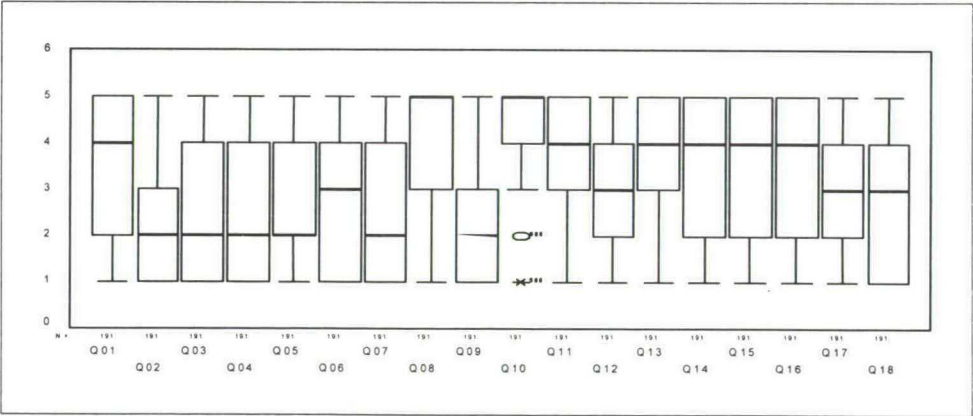
6.3.3 Response heterogeneity

A good general impression can be gained using boxplots. Summarising data, they allow to quickly determine if and how the responses given to the individual questions differ from each

other. The amount of information revealed by boxplots have lead to their being considered as a „robust explorative data analysis procedure“ (Hoaglin, 1983). The following table shows the boxplot of the complete FeMeSA sample. Each column (or box) represents a single question, starting at the left hand with question 1 (labelled Q01). The values on the y-axis correspond to the values present in the (Likert-type) sampling instrument.

At first glance, the presence of high levels of dispersion is confirmed: almost all boxes show large interquartile ranges, thus indicating considerable degrees of variability. In questions 03, 04, 06, 07, and 18 for example, 75% of the respondents selected 4 or less. On the contrary, in question 10 (organisation’s interest), at least 75% selected 4 or 5 (near the “only interested in employee’s completing their job” end).

Table 6-3
Boxplot FeMeSA



Boxplots further allow to recognise the absence of symmetry in the responses. This is the case whenever the median (indicated by the black row dividing the box) is not centred. Leaving aside a few exceptions, the distribution of the answers to the particular questions are not symmetric. An extreme case of asymmetry is question 08; the median coincides with the value 5, an example of strong kurtosis. An exception to the aforementioned response assymetry is question 15 (anybody / only very special people fit well with the organisation). Median lies at 3 and the first and third quartiles at 2 and 4 respectively, a perfectly symmetric response pattern.

6.3.4 Comparing the variance among groups

As suggested by the second explanation, the considerable degrees of variability could be the consequence of measuring as a single group several culturally unrelated groups, each holding a particular view of the organisational reality. As a matter of fact, in any organisation, the odds of finding an all-encompassing, monolithic culture are small. That much literature speaks of „an“ organisational culture instead of using the plural is a mistake probably rooted in the believe that the culture proposed by the organisations’ top echelons is the only one.

Cultural subgroups can in principle be found anywhere within an organisation, but they tend to form along those lines where frequent interactions take or took place. If these groups share perceptions, cultural homogeneity within that particular group increases and the dispersion level lowers.

Table 6-4
Partition criteria FeMeSA

| Criterion | Subsamples | n | code | remarks |
|-------------------|----------------------------|-----|------|----------------------|
| No criterion | | 191 | | Total sample |
| Department | Transporte | 69 | 1 | Transport |
| | Rec. Humanos | 15 | 2 | Human resources |
| | Infraestructura | 47 | 3 | Infrastructure |
| | Material rodante | 56 | 4 | Rolling material |
| | Unidades | 4 | 5 | diverse units |
| Previous employer | first job | 34 | 1 | |
| | another SOE | 16 | 2 | |
| | Public sector | 8 | 3 | |
| | Private sector | 83 | 4 | |
| | Independent | 30 | 5 | |
| Union membership | La Fraternidad | 29 | 1 | conductors |
| | Asoc. Señaleros | 11 | 2 | switch operators |
| | Union Ferroviaria | 127 | 3 | general |
| | APDFA | 24 | 4 | managers |
| Education | Primary school (or less) | 90 | 1 | 7 years or less |
| | Secondary school (or less) | 74 | 2 | 8 to 12 yrs. or less |
| | Tertiary education | 27 | 3 | 13 or more years |
| Age | 34 or less | 60 | 1 | |
| | 45 – 49 | 90 | 2 | |
| | 50 or more | 41 | 3 | |
| Seniority | 10 or less years | 50 | 1 | |
| | 11 to 20 | 87 | 2 | |
| | 21 or more | 54 | 3 | |
| Occupation | Engineers | 29 | 1 | Engineers |
| | Señaleros | 11 | 2 | Switch operators |
| | Administrativos | 29 | 3 | Administration |
| | Operarios | 98 | 4 | Shop-floor wrkrs. |
| | Gerentes | 24 | 5 | Managers |
| Locality | On the train | 29 | 1 | (engineers) |
| | Along the track | 11 | 2 | (switch operators) |
| | Headquarters | 50 | 3 | (at the terminus) |
| | Other, distant locations | 101 | 4 | (+20 km. from 3) |

Starting from the consideration that a single culture is -at the organisational level- rather the exception than the rule, and taking into account the huge variances observed, various attempts were undertaken to discover possible subcultures within FeMeSA. As mentioned in the chapter on methodology, the sample was divided following potential lines of internal cultural fragmentation. Probable cleavages within FeMeSA were structural, occupational, or geographical boundaries. In addition, subsamples were formed according to union membership, previous working experience, seniority, age and educational level. Table 6-4 offers an overview of the criteria employed and the resulting subsamples.

The criteria “occupation”, “locality” and “union membership” partly overlap, generating some degree of redundancy. The identical subsamples are a direct consequence of restrictive regulations or of sampling conditions imposed by the unions. The criterion “hierarchical level” has been left out of consideration because by the time of our measurement the positions within the organisational structure were in absolute disarray. Given the high level of personnel fluctuation, positions were covered for extremely short periods of time (often less than a week), and on an ad-hoc basis. As a matter of fact, during our two-months-long stay in the company the personnel department was not able to produce a single valid organigram.

The different subsamples and their associated mean and dispersion are presented in the Addendum at the end of this chapter. This table was first approached in an exploratory way, looking for systematic differences among the categories. None of the generated subsamples showed consistently different (particularly low) degrees of dispersion.

Not having found a useful grouping criterion, it was decided to corroborate these findings by means of alternative procedures. As a first step, we ran the Levene test in order to examine if the assumptions are given to run an Anova³ and to test if statistically significant differences exist among the variance of the subsamples.

Table 6-5
Comparison of variances FeMeSA

| Comparison of variances ¹ | | | | | | | | | | | | | | | | | | |
|--------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| sample by ... | | | | | | | | | | | | | | | | | | |
| union | | | | * | | | | | | | | | | | | | | |
| department | * | | * | | | * | * | * | * | * | | | | | * | | | |
| type of job | | | * | * | | | | | | * | | | * | | | | | |
| locality | | | * | * | | | | | | * | | | | | | | | |
| prev. work exp. | | * | | * | | | | | | * | | | * | | | | | |
| seniority | | | | | | * | | | | * | | * | | | | | * | |
| education | * | * | * | * | * | * | * | * | | | * | * | | | | | | * |
| age | | * | | | | | | | | | | * | | | * | | | |

¹ An asterisk meaning that the variance of two subsamples is significantly different at the $p \leq 0.05$ level.

As can be inferred from Table 6-5, the variance of no subsample differs significantly on all 18 questions from another subgroup. Since our previous exploratory analysis demonstrated that no subsample shows consistently low degrees of dispersion, it can be concluded that there was no culturally homogenous group at FeMeSA.

However, on the basis of the partition criteria proposed, the Levene test shows that some subsamples do differ from others – at least on a number of questions. The fact that some partition criteria divide the sample into groups that show significantly different dispersions while others do not, raises the question about the usefulness of such criteria, an issue treated at length later on. Regarding our second aim, the preceding table shows that the assumption of homogeneity of variance has been violated.

6.3.5 Comparing the mean of the diverse groups

Following our analysis of the different subsamples, their respective means will be scrutinised closer. Taking into account the violated assumptions, Kruskal-Wallis’ H test will be used, a non-parametric alternative to the one-way Anova.

Table 6-6
Comparison of means FeMeSA

| | | Comparison of means ¹ | | | | | | | | | | | | | | | | | |
|-----------------|------|----------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| sample by ... | item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| union | | | | | | | * | * | * | | | | | * | * | | | | * |
| department | | | | | | | * | * | * | * | * | | | | * | | | | * |
| type of job | | | | | | | * | * | * | * | * | | | * | * | | | | * |
| locality | | | | | | | * | * | * | * | * | | | * | * | | * | | * |
| prev. work exp. | | | | | | | | | | | * | | | | | | | | |
| seniority | | | | | | | | | | | | | | | | | | * | |
| education | * | | | | | | * | * | * | | * | * | * | | * | | | | * |
| age | | | | | | | | | | | | | * | | | * | | | |

¹ Kruskal-Wallis test: an asterisk shows that the means of at least two subsamples are significantly different at the p ≤ 0.05 level.

As can be observed from Table 6-6, no subgroup differs both significantly and systematically, that is, along all or most of the questions, from the other subsamples. On some items however, the means of some groups differ significantly. To determine the specific subsamples that constitute these exceptions, the Scheffe test was employed. The following Table enumerates the groups whose mean values differ significantly.

No data is available pointing out a single group. Some evidence nevertheless confirms the often heard comments about the engineers as “being different”. Though limited to only some questions, the engine drivers score significantly different on two or more questions of the three relevant criteria.

Table 6-7
Significant pairs FeMeSA

| Comparison of variances ¹ | |
|--------------------------------------|--|
| criterion | question (specific subsamples) |
| union | 7 (1≠3); 8 (3≠4); 13 (1≠2). |
| department | 6 (3≠1,2,4); 8 (2≠3); 9 (3≠1,2) (2≠4); 10 (2≠3,4); 14 (1≠3) (3≠4); 18 (1≠3,4). |
| occupation | 7 (1≠4); 8 (4≠3,5); 9 (3≠5); 10 (3≠4); 13 (2≠1,4) (3≠4). |
| locality | 7 (1≠4); 8 (3≠4); 10 (3≠4); 13 (2≠1,4) (3≠1,4); 18 (1≠4). |
| prev. work experience | 10 (3≠4) |
| seniority | 17 (2≠1,3) |
| education | 1 (2≠3); 6 (1≠3); 7 (1≠2,3); 8 (1≠3); 11 (1≠2,3); 12 (1≠3); 18 (1≠2). |
| age | 2 (2≠3); 12 (1≠3); 15 (2≠3). |

¹ Scheffe test: listed between parenthesis are the subsamples significantly different at the $p \leq 0.05$ level.

In general terms however, the results hitherto obtained allow to infer that the subsamples do not differ significantly and systematically from each other. To say that the only trait in common is the absence of a common trait is paradoxical but illustrative. The few exceptions are largely outweighed by the lack of statistically significant differences. Consequently, and as a final step in the search for a subsample that differs significantly from the rest, a hierarchical cluster analysis was performed. The resulting dendrogram can be found as Appendix 3.

The results of the cluster analysis are in line with the previous findings: no clearly defined group emerges. Three wide clusters are formed (81↔164; 10↔129; 131↔105), but a performed case-by-case analysis does not forward any singular pattern. On the other hand, the relatively small distances on the scale allow to infer that if any differences are found, these will most likely be very small ones. In other words, the kind of "super-clusters" found by Hofstede (1998: 6) in his a posteriori identification of subcultures, could not be detected.

In summary, the rather large level of variability suggested by the boxplot and reflected in the obtained dispersions is the most relevant trait of this sample. Neither the analysis of variance, the comparison of means, nor the cluster analysis have forwarded a single subsample significantly different from the other groups. There is not a single group that systematically shares organisational practices to a statistically significant level. Thus we can conclude that the observed fragmentation is clearly not an error derived from the use of global measurements but a deeply rooted pattern of the unit. In other words: from a cultural perspective, the population of FeMeSA is highly heterogeneous.

6.4 A global assessment

The observed cultural disparity raises the question whether this cultural weakness was a long-standing trait, and if not, when the process of fragmentation started to dilute the previously existing cultural order. Aware of the reasons behind Ferrocarriles' weak culture, the significance of the high levels of dispersion found at FeMeSA may be recasted. Needless to

add, their rather high degree reduces the meaningfulness of the questions' mean value. On the other hand, precisely their high degree implies that there were no common understandings present at FeMeSA. In other words, that practices within that same company –or at least the perceptions thereof– were not shared. In addition, the correspondence between this latter interpretation and the qualitative analysis debilitates the possibility that the questionnaires were answered at random. The general pattern depicted by the statistical approach is also consistent with the findings of other scholars (Tesoro, 1996; Silverleaf, 1994).

It is clear that the most striking cultural trait lies in the fragmented and differentiated perceptions of the respondents about the daily practices. There were, nevertheless, some common traits. In what follows the quantitative data will be combined with information obtained through interviews and the analysis of documents, in an attempt to sketch the culture's main facets.

6.4.1 Apathy

According to Sethia and von Glinow (1985), the major underpinnings of an organisation's culture are provided by its human resource orientation. These authors build a typology based on the management's level of concern for people and for peoples' performance in the organisation. These two orientations correspond to the two axes of Blake and Moutons' Managerial Grid (1964), who also handle them as two independent dimensions.

Concern for people refers to the organisation's interest in the well-being of its members and their families. One of the few questions from which a clear pattern emerges asks where the organisation's interest lies. While about two-thirds of the respondents perceive that "the company is only interested in the job done by the employee", less than 7% of the sample believe that the company takes direct responsibility for the workers and their families' welfare. The mean of 4,2 unequivocally signals what employees see as lack of interest and disregard on part of the organisation. Even though it could be argued that this perception has been generated by the recent string of layoffs and thus only constitutes a circumstantial trait, there are several characteristics that allow to conclude that the view has deep roots.

As an indicator of the importance attributed to the human resources, it could be mentioned that there never was a coherent personnel development program, or that out of all Argentinean SOEs, Ferrocarriles –at least in 1986– had the smallest Human Resources department, with 402 persons handling the affairs of almost 100,000 employees, i.e. a ratio of 1:250 (Ferrocarriles, 1990).

Thus, there are sufficient reasons to conclude that the employee's perception was right and that the company's orientation could be characterised as one of little concern for their employees. As a matter of fact, it could be reasonably argued if this was an "orientation" at all. Considering the absence of clearly formulated policies, most probably it was not the result of a purposive laissez-faire policy but the combined byproduct of managerial negligence and inaptitude.

The second orientation found by Sethia and von Glinow deals with the organisations' concern about the employees' performance. It refers to the organisation's expectations that its

members will give their best on their jobs and make full use of their individual talents. According to the survey, people experience a strong pressure to complete their duty (mean = 2,3). This perception contradicts available data and information about Ferrocarriles' reality (e.g. the high absenteeism and extremely low quantity of actually performed working hours). The disregard for the employees' productivity is further evidenced by the lack of any tie between performance and payment (there have been regulations that specifically forbid to bind productivity to payment, FIEL, 1989) and the lack of a high level policy regarding further education (when training was provided, it was done ritualistically or –for the engineers– by the union).

As mentioned before, this apparent contradiction is resolved if the alterations caused by the collective layoffs, the personnel transfers and continuous reshuffling of groups are taken into consideration. Hence the perceived job pressure is of circumstantial nature and does not display its true nature. Consequently, the unit could be characterised, -at least until deregulation- as having also a low concern for performance. A culture with a low score on both dimensions is defined by Sethia and von Glinow as "apathetic". Of course, because of the interdependence between culture and individual involvement, the viability of a unit with such a culture is difficult. When the contract between an organisation and its members takes place on an extremely low level, the resulting practices are the often mentioned lackadaisical approaches to the job or aloof attitudes regarding the customers.

The secondary data obtained strongly suggest that Ferrocarriles scores low on both orientations and that these scores were by no means circumstantial. The fact that pernicious practices have become firmly entrenched and no serious effort was started to remove them, was only possible because of the protected environment in which this monopoly subsisted.

6.4.2 Detachment

In line with what employees perceive as a lack of concern for people and their welfare on part of the company, roughly 50% of the respondents consider their private lives as their own business. Only one-tenth feels that the organisation's norms cover their behaviour at home as well as on the job. The combined analysis of this two questions enhances the aforementioned conclusions regarding the unit's (low) concern for their members. It reveals a situation of detachment from the organisation. Not having previous data, the direction of such a trend can only be guessed. However, taking into account the ongoing process, it seems plausible that the employees are trying to dissolve any ties with the company they are working for. This trait has important consequences for the organisational climate. However, in as far as it influences the perceptions of the organisational practices, it also constitutes a cultural matter.

6.4.3 Feeling like an orphan

To our surprise, in this company and its more than centenarian history, neither a common nor a local (subcultural) hero was found. One of the main reasons resides in the absence of leadership continuity, the only exception to this lack being the tenure of J.C. de Marchi. This former President was recalled by many of our interviewees as a man who moulded the company in a particular, albeit transitory way. This "particular" way can best be described as an authoritarian leadership (de Marchi was an army general designated as head in 1967 by the

de facto government of general J.C. Onganía, who seized power a year before). Interestingly, though while he was in charge of the company attendance was strictly controlled and punishments were harsh, his tenure is fondly recalled. Frequently the interviewees summarised their impression about this particular period declaring that “we’re sons of rigour” (somos hijos del rigor), a saying meaning that they only work well if enough pressure is exercised from above.

Also conspicuously missing were countercultural heroes. In spite of Ferrocarriles long-standing history of strong unionism, no union official was mentioned as having an influence upon the member’s behaviour or views. Instead, there were persistent rumours about the co-optation of the actual leaders by the future owners of the unit. As is often the case in analogous situations, the union leaders were considered traitors and their purportedly lack of resistance defined as a sell-out.

The lack of leaders and rapid succession of short presidencies has been summarised with particular pointedness by an interviewee, who asserted that “The company had many husbands, but we’re still orphans”.

6.5 Unhappy transitions: Ferrocarriles’ glory, decay, and agony

Many railway historians (Cuccorese, 1984; Roccatagliata, 1987) and most of our interviewees coincide in setting the begin of the Argentinean railway system’s decay at about the time of nationalisation. In other words, if at all, Ferrocarriles is granted only one day of glory, namely the day of its creation. Figures and stories abound that underscore the perception that from then on Ferrocarriles declined. Though some of these have been mentioned in the preceding chapters, they will be briefly highlighted since they constitute the foundation of often heard myths about Ferrocarriles decay and agony.

At the beginning of the century the network had a length of approximately 16500 km. By 1948, it grew to some 42500 km. In the five years that followed nationalisation, a mere 1500 km were added. Since then, the length was reduced; by 1982, 10000 km of track had been deleted.

In 1948, Ferrocarriles employed some 173000 persons. Ten years later, the company reached its maximum with nearly a quarter million members. Since then, and almost without exception, this figure has been reduced; when deregulation began, only 68000 were still working for the whole system.

Around 1940, the railway system hauled 75% of all the cargo transported; 50 years later, its market share fall to less than 10% (FIEL, 1989).

The level of subsidy needed to cover the company’s deficit increased steadily; during the last decade, the company was loosing more than 2 million dollars a day.

These figures and other stories permeated all levels of the organisation and induced a concoction of feelings ranging from despair to outrage in most of the company’s agents. They generated in many individuals a sense of plain impotence.

6.6 Summary

It is evident that Ferrocarriles' culture was severely debilitated by the time the deregulatory process began. However, it seems likely that the changes introduced as a consequence of the decision to privatise further fragmented the remaining cultural elements, leading to the absence of common understandings revealed by the quantitative survey. The operated changes were performed by Ferrocarriles' (and later FeMeSA's) new authorities in order to make the units into which Ferrocarriles was partitioned attractive to prospective bidders. The main instrument for that purpose was the dismissal -by a variety of means- of large numbers of employees. Most common was the use of voluntary or early retirement schemes. Under the latter, all workers 65 years or older were forced into retirement. Agents under that age that opted for early retirement had to leave the company, but remained on the payroll for additional 18 months and were given a lump-sum as indemnification. Combined, these two measures reduced the number of employees by two thirds within the period 1990 - 1994.

These measures had obvious consequences for the organisation in general and the culture in particular. With regard to the latter, it should be noted that the forced retirement eliminated overnight years of accumulated experience and much of the company's collective memory. The success (in terms of dismissed personnel) of both schemes deeply affected some particular areas. Highly professional units (as e.g., EDP, electricians or mechanics) that counted with a strong external market, ended up understaffed. On the other hand, the voluntary character of the second scheme added a certain degree of unpredictability to the process. As a consequence of both schemes, established groups either disappeared or were divided into even smaller units. Other groups were divided in order to cover the 2nd. or 3rd. shift. The general manpower shortage was compounded by its unbalanced allocation, forcing the continuous reshuffling of groups and intraorganisational transfer of human resources.

As the privatisation process proceeded and some units were handed over to the private sector, the remaining employees (that is, those below 65 that did not opt for voluntary retirement) were reallocated in those units still in public hands. Thus for example, sizeable numbers of employees from the suburban Roca and Sarmiento lines were employed by the unit here under analysis. Since the Mitre line was the last suburban line to be transferred, it merged within itself former employees from all of the six lines that composed the network.

According to Schein (1989), group and culture are two sides of the same coin. If groups are dismembered, reshuffled, or merged with alien elements, and this over a prolonged period of time, most of the company's common understandings will probably succumb. This even more, if the inherited culture was infirm and fragmented. Leaving aside the reductions in personnel suffered before 1989, suffice it to say that by the time deregulation started, Ferrocarriles had a work force of over 93000. Three years later, it counted 51000. In April 1992, when FeMeSA was created, the Mitre line was 3500 man strong. This reduction was accomplished by collective layoffs and -to a smaller extent- personnel transfers to other public units (v.g. 1500 agents to the federal IRS). By the time of the survey, the groups or gangs formed by the 2000 remaining employees more often than not were composed by employees that hardly knew each other. Arrived at this point, it seems rather clear that the reason behind the disparity in the answers is located in the shake-up caused by the severe rationalisation attempts.

¹ This figures include an estimation of the levels of evasion (free riders) which before the concessions was between 30 and 60 %, depending on the line and time.

² Based on these facts and in order to prove the apparent lack of relation between the data obtained at FeMeSA and the dimensions found by Hofstede et al., it was decided to run a reliability analysis. Therefore the mean value of the more consistent sub-samples (i.e., those aggregated according to the occupation criteria) were employed. As expected, the calculated (Cronbach's) Alpha values were low, in two cases even negative, thus violating reliability.

| factor | Cronbach's Alpha | | | | | |
|--------|------------------|---------|--------|---------|---------|---------|
| | P1 | P2 | P3 | P4 | P5 | P6 |
| items | 3,8,18 | 2,4,10 | 5,9,16 | 6,12,14 | 7,11,13 | 1,15,17 |
| alpha | 0.1182 | -0.7342 | 0.2717 | -0.6012 | 0.1848 | 0.0790 |

The attempt to replicate Hofstede et al. methodology within an organisation is debatable, since the results are obviously not ecological in the sense that they have been calculated across different units. But neither are the values here used been calculated across individuals (pancultural level). The values used in this analysis are means of samples divided according to the "occupation" criteria, thus ensuring that responses stem from people who actually have a common working experience. Since a) aggregate measures of these samples were employed, b) small (or no) interaction existed between members of these samples, c) FeMeSA stems from a large organisation (+100.000), and d) the high levels of heterogeneity detected, it was concluded that these (sub) samples could be understood as culturally different units and thus enable an analysis at the ecological level. However, the Alpha scores obtained preclude us from interpreting FeMeSA's cultural reality using Hofstede et al. (1990) dimensions. Consequently, it was decided not to employ the formulas generated by Hofstede et al. and obtain FeMeSA's scores for each dimension.

³ In order to be able to perform an analysis of variance it was necessary to proof whether all distributions were normal and that all the distributions had similar variances. In other words, the assumption of homogeneity of variance was tested.

Addendum 6-1

Correlations Matrix (FeMeSA)

| | | | | | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| VAR1 | 1,00 | 0,75 | 0,61 | 0,88 | 0,01 | -0,74 | 0,69 | 0,76 | -0,36 | -0,48 | -0,94 | -0,59 | -0,55 | 0,55 | -0,10 | -0,08 | 0,46 | -0,43 |
| VAR10 | 0,75 | 1,00 | 0,43 | 0,64 | 0,31 | -0,12 | 0,72 | 0,80 | 0,17 | 0,19 | -0,75 | -0,39 | -0,39 | 0,06 | -0,26 | -0,29 | 0,66 | -0,76 |
| VAR11 | 0,61 | 0,43 | 1,00 | 0,79 | -0,09 | -0,53 | 0,55 | 0,83 | -0,69 | -0,55 | -0,83 | 0,24 | -0,60 | 0,85 | -0,54 | -0,48 | 0,85 | 0,17 |
| VAR12 | 0,88 | 0,64 | 0,79 | 1,00 | -0,35 | -0,73 | 0,87 | 0,90 | -0,63 | -0,56 | -0,91 | -0,38 | -0,86 | 0,75 | -0,53 | -0,49 | 0,66 | -0,08 |
| VAR13 | 0,01 | 0,31 | -0,09 | -0,35 | 1,00 | 0,38 | -0,43 | -0,12 | 0,65 | 0,45 | -0,06 | 0,18 | 0,72 | -0,44 | 0,59 | 0,55 | 0,03 | -0,64 |
| VAR14 | -0,74 | -0,12 | -0,53 | -0,73 | 0,38 | 1,00 | -0,37 | -0,39 | 0,77 | 0,93 | 0,67 | 0,47 | 0,52 | -0,81 | 0,01 | -0,07 | -0,09 | -0,19 |
| VAR15 | 0,69 | 0,72 | 0,55 | 0,87 | -0,43 | -0,37 | 1,00 | 0,88 | -0,35 | -0,16 | -0,69 | -0,41 | -0,91 | 0,42 | -0,73 | -0,73 | 0,67 | -0,21 |
| VAR16 | 0,76 | 0,80 | 0,83 | 0,90 | -0,12 | -0,39 | 0,88 | 1,00 | -0,40 | -0,23 | -0,88 | -0,12 | -0,77 | 0,58 | -0,67 | -0,65 | 0,90 | -0,22 |
| VAR17 | -0,36 | 0,17 | -0,69 | -0,63 | 0,65 | 0,77 | -0,35 | -0,40 | 1,00 | 0,90 | 0,46 | -0,08 | 0,66 | -0,95 | 0,45 | 0,36 | -0,31 | -0,69 |
| VAR18 | -0,48 | 0,19 | -0,55 | -0,56 | 0,45 | 0,93 | -0,16 | -0,23 | 0,90 | 1,00 | 0,49 | 0,14 | 0,42 | -0,89 | 0,04 | -0,05 | -0,05 | -0,52 |
| VAR2 | -0,94 | -0,75 | -0,83 | -0,91 | -0,06 | 0,67 | -0,69 | -0,88 | 0,46 | 0,49 | 1,00 | 0,28 | 0,58 | -0,68 | 0,27 | 0,24 | -0,70 | 0,29 |
| VAR3 | -0,59 | -0,39 | -0,29 | -0,48 | 0,18 | 0,47 | -0,41 | -0,12 | -0,08 | 0,14 | 0,28 | 1,00 | 0,26 | 0,07 | -0,24 | -0,23 | 0,30 | 0,51 |
| VAR4 | -0,55 | 0,06 | 0,85 | 0,75 | -0,44 | -0,81 | -0,91 | -0,77 | 0,66 | 0,42 | 0,58 | 0,26 | 1,00 | -0,65 | 0,82 | 0,79 | -0,58 | -0,20 |
| VAR5 | 0,55 | -0,10 | -0,08 | 0,46 | -0,43 | -0,21 | 0,67 | -0,22 | -0,65 | 0,90 | -0,22 | -0,67 | -0,65 | 0,90 | -0,22 | -0,65 | 0,90 | -0,22 |
| VAR6 | 0,55 | -0,10 | -0,08 | 0,46 | -0,43 | -0,21 | 0,67 | -0,22 | -0,65 | 0,90 | -0,22 | -0,67 | -0,65 | 0,90 | -0,22 | -0,65 | 0,90 | -0,22 |
| VAR7 | 0,55 | -0,10 | -0,08 | 0,46 | -0,43 | -0,21 | 0,67 | -0,22 | -0,65 | 0,90 | -0,22 | -0,67 | -0,65 | 0,90 | -0,22 | -0,65 | 0,90 | -0,22 |
| VAR8 | 0,55 | -0,10 | -0,08 | 0,46 | -0,43 | -0,21 | 0,67 | -0,22 | -0,65 | 0,90 | -0,22 | -0,67 | -0,65 | 0,90 | -0,22 | -0,65 | 0,90 | -0,22 |
| VAR9 | 0,55 | -0,10 | -0,08 | 0,46 | -0,43 | -0,21 | 0,67 | -0,22 | -0,65 | 0,90 | -0,22 | -0,67 | -0,65 | 0,90 | -0,22 | -0,65 | 0,90 | -0,22 |

Addendum 6-2

Mean value and Standard Deviation by sample (FeMeSA)

| Criterion / sample | n | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
|--------------------|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| TOTAL | 191 | 3.32 1.50 | 2.35 1.17 | 2.43 1.48 | 2.66 1.61 | 2.65 1.36 | 2.82 1.56 | 2.63 1.58 | 3.92 1.35 | 2.19 1.38 | 4.24 1.24 | 3.57 1.24 | 3.17 1.42 | 3.77 1.33 | 3.29 1.47 | 3.29 1.50 | 3.22 1.56 | 2.88 1.35 | 3.04 1.54 |
| UNION | | | | | | | | | | | | | | | | | | | |
| La Fraternidad | 29 | 3.45 1.30 | 2.14 0.92 | 2.45 1.35 | 2.93 1.73 | 2.83 1.63 | 3.41 1.52 | 3.38 1.52 | 3.79 1.52 | 2.31 1.39 | 4.10 1.37 | 3.83 1.07 | 3.21 1.32 | 4.17 1.07 | 2.79 1.57 | 3.03 1.68 | 3.13 1.51 | 2.72 1.41 | 2.45 1.33 |
| ASFA | 11 | 3.55 1.63 | 2.00 1.18 | 2.36 1.43 | 1.82 1.40 | 3.00 1.55 | 2.18 1.40 | 2.00 1.26 | 4.27 1.27 | 2.64 1.29 | 4.27 1.27 | 4.09 1.04 | 3.55 1.29 | 2.73 1.10 | 2.55 1.44 | 3.73 1.68 | 3.73 1.49 | 2.45 1.29 | 2.27 1.27 |
| Unión Ferroviaria | 127 | 3.26 1.56 | 2.41 1.22 | 2.49 1.54 | 2.67 1.63 | 2.60 1.32 | 2.65 1.56 | 2.41 1.56 | 4.06 1.31 | 2.17 1.43 | 4.28 1.28 | 3.55 1.45 | 3.13 1.38 | 3.83 1.38 | 3.54 1.40 | 3.31 1.42 | 3.25 1.56 | 2.94 1.36 | 3.28 1.55 |
| APDFA | 24 | 3.42 1.41 | 2.42 1.14 | 2.17 1.43 | 2.67 1.37 | 2.58 1.10 | 3.33 1.46 | 3.21 1.50 | 3.21 1.22 | 2.00 1.14 | 4.17 0.92 | 3.13 1.26 | 3.17 1.46 | 3.46 1.25 | 2.96 1.52 | 3.29 1.65 | 2.92 1.72 | 2.92 1.32 | 2.88 1.60 |
| DEPARTMENT | | | | | | | | | | | | | | | | | | | |
| Transport | 69 | 3.19 1.39 | 2.17 1.06 | 2.46 1.38 | 2.62 1.59 | 2.87 1.44 | 3.06 1.54 | 2.71 1.59 | 3.81 1.42 | 2.49 1.43 | 4.10 1.37 | 3.65 1.25 | 3.19 1.37 | 3.49 1.39 | 2.94 1.53 | 3.38 1.63 | 3.13 1.64 | 2.59 1.31 | 2.46 1.44 |
| Human Resources | 15 | 3.33 1.68 | 2.73 1.03 | 1.80 0.86 | 2.93 1.58 | 2.33 1.11 | 3.20 1.47 | 2.93 1.49 | 3.13 1.51 | 3.33 1.50 | 3.33 1.50 | 3.47 1.41 | 3.00 1.41 | 3.73 1.44 | 3.27 1.22 | 3.13 1.51 | 2.60 1.50 | 3.13 1.41 | 3.07 1.39 |
| Infrastructure | 47 | 3.26 1.71 | 2.32 1.32 | 2.30 1.64 | 3.06 1.66 | 2.47 1.50 | 1.89 1.20 | 2.02 1.31 | 4.30 1.16 | 1.49 1.08 | 4.57 0.97 | 3.53 1.30 | 3.28 1.36 | 3.98 1.26 | 4.00 1.27 | 3.38 1.47 | 3.06 1.51 | 3.15 1.38 | 3.34 1.59 |
| Rolling material | 56 | 3.48 1.45 | 2.48 1.19 | 2.73 1.59 | 2.23 1.55 | 2.59 1.17 | 3.16 1.63 | 2.88 1.71 | 4.02 1.30 | 2.13 1.22 | 4.34 1.13 | 3.55 1.22 | 3.16 1.55 | 4.02 1.26 | 3.14 1.45 | 3.11 1.42 | 3.52 1.50 | 2.91 1.38 | 3.46 1.48 |
| "Unidades" | 4 | 4.25 0.50 | 2.25 1.26 | 1.75 0.96 | 3.50 1.29 | 3.25 0.96 | 3.50 1.29 | 4.00 0.82 | 3.00 0.82 | 2.00 1.41 | 4.50 0.58 | 3.25 0.50 | 2.25 1.26 | 3.00 1.41 | 3.25 1.71 | 3.75 0.50 | 4.75 0.50 | 3.25 0.50 | 3.50 1.73 |
| OCCUPATION | | | | | | | | | | | | | | | | | | | |
| engineers | 29 | 3.45 1.30 | 2.14 0.92 | 2.45 1.35 | 2.93 1.73 | 2.83 1.63 | 3.41 1.52 | 3.38 1.52 | 3.79 1.52 | 2.31 1.39 | 4.10 1.37 | 3.83 1.07 | 3.21 1.32 | 4.17 1.07 | 2.79 1.57 | 3.03 1.68 | 3.13 1.51 | 2.72 1.41 | 2.45 1.33 |
| switch operators | 11 | 3.55 1.63 | 2.00 1.18 | 2.36 1.43 | 1.82 1.40 | 3.00 1.55 | 2.18 1.40 | 2.00 1.26 | 4.27 1.27 | 2.64 1.29 | 4.27 1.27 | 4.09 1.04 | 3.55 1.29 | 2.73 1.10 | 2.55 1.44 | 3.73 1.68 | 3.73 1.49 | 2.45 1.29 | 2.27 1.27 |
| administrative | 29 | 3.03 1.59 | 2.79 1.08 | 2.55 1.21 | 2.83 1.36 | 2.66 1.23 | 2.86 1.36 | 2.72 1.53 | 3.38 1.35 | 2.90 1.59 | 3.52 1.53 | 3.28 1.33 | 2.93 1.36 | 3.17 1.56 | 3.38 1.37 | 2.93 1.53 | 2.62 1.52 | 2.76 1.27 | 2.86 1.57 |

Addendum 6-2 (cont.)

Mean value and Standard Deviation by sample (FeMeSA)

| Criterion / sample | n | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
|--------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| OCCUPATION | | | | | | | | | | | | | | | | | | | |
| operative | 98 | 3.33 | 2.30 | 2.47 | 2.62 | 2.58 | 2.58 | 2.32 | 4.26 | 1.95 | 4.50 | 3.63 | 3.18 | 4.03 | 3.58 | 3.42 | 3.44 | 3.00 | 3.40 |
| | | 1.55 | 1.25 | 1.63 | 1.71 | 1.35 | 1.61 | 1.56 | 1.23 | 1.31 | 1.11 | 1.26 | 1.48 | 1.26 | 1.41 | 1.37 | 1.53 | 1.38 | 1.53 |
| management | 24 | 3.42 | 2.42 | 2.17 | 2.67 | 2.58 | 3.33 | 3.21 | 3.21 | 2.00 | 4.17 | 3.13 | 3.17 | 3.46 | 2.96 | 3.29 | 2.92 | 2.92 | 2.88 |
| | | 1.41 | 1.14 | 1.43 | 1.37 | 1.10 | 1.46 | 1.50 | 1.22 | 1.14 | 0.92 | 1.26 | 1.46 | 1.25 | 1.52 | 1.65 | 1.72 | 1.32 | 1.60 |
| LOCALITY | | | | | | | | | | | | | | | | | | | |
| on the train | 29 | 3.45 | 2.14 | 2.45 | 2.93 | 2.83 | 3.41 | 3.38 | 3.79 | 2.31 | 4.10 | 3.83 | 3.21 | 4.17 | 2.79 | 3.03 | 3.13 | 2.72 | 2.45 |
| | | 1.30 | 0.92 | 1.35 | 1.73 | 1.63 | 1.52 | 1.52 | 1.52 | 1.39 | 1.37 | 1.07 | 1.32 | 1.07 | 1.57 | 1.68 | 1.51 | 1.42 | 1.33 |
| along the track | 11 | 3.55 | 2.00 | 2.36 | 1.82 | 3.00 | 2.18 | 2.00 | 4.27 | 2.64 | 4.27 | 4.09 | 3.55 | 2.73 | 2.55 | 3.73 | 3.73 | 2.45 | 2.27 |
| | | 1.63 | 1.18 | 1.43 | 1.40 | 1.55 | 1.40 | 1.26 | 1.27 | 1.29 | 1.27 | 1.04 | 1.29 | 1.10 | 1.44 | 1.68 | 1.49 | 1.29 | 1.27 |
| headquarters | 50 | 3.18 | 2.60 | 2.40 | 2.80 | 2.66 | 3.18 | 2.88 | 3.36 | 2.58 | 3.78 | 3.22 | 3.10 | 3.20 | 3.10 | 3.16 | 2.70 | 2.82 | 2.76 |
| | | 1.48 | 1.14 | 1.34 | 1.39 | 1.17 | 1.38 | 1.55 | 1.29 | 1.46 | 1.34 | 1.33 | 1.40 | 1.40 | 1.43 | 1.57 | 1.62 | 1.30 | 1.55 |
| other | 101 | 3.34 | 2.32 | 2.46 | 2.60 | 2.56 | 2.54 | 2.37 | 4.20 | 1.92 | 4.50 | 3.61 | 3.15 | 4.06 | 3.61 | 3.38 | 3.45 | 3.00 | 3.44 |
| | | 1.56 | 1.23 | 1.61 | 1.69 | 1.34 | 1.60 | 1.57 | 1.26 | 1.30 | 1.09 | 1.24 | 1.48 | 1.26 | 1.40 | 1.39 | 1.51 | 1.37 | 1.53 |
| AGE | | | | | | | | | | | | | | | | | | | |
| 34 or less | 60 | 3.25 | 2.25 | 2.35 | 2.61 | 2.36 | 2.73 | 3.13 | 3.85 | 2.20 | 4.25 | 3.56 | 2.80 | 3.96 | 3.33 | 3.41 | 3.26 | 2.83 | 2.96 |
| | | 1.48 | 0.98 | 1.42 | 1.71 | 1.35 | 1.51 | 1.46 | 1.32 | 1.37 | 1.23 | 1.04 | 1.33 | 1.27 | 1.48 | 1.50 | 1.50 | 1.34 | 1.45 |
| 45 – 49 | 90 | 3.39 | 2.31 | 2.40 | 2.65 | 2.80 | 3.08 | 2.36 | 3.80 | 2.16 | 4.24 | 3.53 | 3.25 | 3.61 | 3.24 | 3.17 | 3.22 | 2.96 | 3.13 |
| | | 1.46 | 1.25 | 1.49 | 1.53 | 1.28 | 1.64 | 1.56 | 1.38 | 1.35 | 1.24 | 1.28 | 1.48 | 1.37 | 1.48 | 1.48 | 1.61 | 1.35 | 1.57 |
| 50 or more | 41 | 3.29 | 2.56 | 2.63 | 2.73 | 2.75 | 2.39 | 2.48 | 4.29 | 2.24 | 4.19 | 3.65 | 3.51 | 3.85 | 3.34 | 3.34 | 3.14 | 2.75 | 2.95 |
| | | 1.64 | 1.22 | 1.56 | 1.64 | 1.47 | 1.35 | 1.64 | 1.27 | 1.46 | 1.29 | 1.44 | 1.28 | 1.33 | 1.45 | 1.54 | 1.57 | 1.39 | 1.62 |
| GENDER | | | | | | | | | | | | | | | | | | | |
| Male | 179 | 3.32 | 2.28 | 2.41 | 2.64 | 2.65 | 2.83 | 2.66 | 3.94 | 2.13 | 4.27 | 3.59 | 3.15 | 3.80 | 3.30 | 3.33 | 3.25 | 2.89 | 3.08 |
| | | 1.49 | 1.15 | 1.49 | 1.62 | 1.37 | 1.57 | 1.59 | 1.35 | 1.33 | 1.22 | 1.22 | 1.42 | 1.32 | 1.47 | 1.49 | 1.55 | 1.35 | 1.54 |
| Female | 12 | 3.25 | 3.25 | 2.75 | 2.91 | 2.58 | 2.58 | 2.16 | 3.58 | 3.08 | 3.58 | 3.25 | 3.33 | 3.41 | 3.08 | 2.58 | 2.75 | 2.66 | 2.41 |
| | | 1.60 | 1.05 | 1.28 | 1.44 | 0.99 | 1.31 | 1.33 | 1.31 | 1.72 | 1.37 | 1.48 | 1.43 | 1.56 | 1.44 | 1.50 | 1.71 | 1.37 | 1.37 |

Addendum 6-2 (cont.)

Mean value and Standard Deviation by sample (FeMeSA)

| Criterion / sample | n | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
|--------------------------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| EDUCATION | | | | | | | | | | | | | | | | | | | |
| Primary or less | 90 | 3.37 | 2.27 | 2.57 | 2.64 | 2.74 | 2.64 | 2.17 | 4.19 | 2.00 | 4.41 | 3.91 | 3.37 | 3.70 | 3.51 | 3.27 | 3.28 | 2.80 | 3.30 |
| | | 1.60 | 1.32 | 1.63 | 1.67 | 1.45 | 1.61 | 1.54 | 1.30 | 1.35 | 1.26 | 1.29 | 1.48 | 1.38 | 1.46 | 1.51 | 1.56 | 1.43 | 1.58 |
| Secondary or less | 74 | 3.05 | 2.44 | 2.48 | 2.67 | 2.64 | 2.75 | 2.93 | 3.85 | 2.43 | 4.04 | 3.37 | 3.13 | 3.87 | 2.95 | 3.40 | 3.14 | 2.89 | 2.70 |
| | | 1.42 | 1.00 | 1.37 | 1.62 | 1.32 | 1.47 | 1.58 | 1.37 | 1.43 | 1.25 | 1.10 | 1.28 | 1.29 | 1.48 | 1.47 | 1.58 | 1.27 | 1.44 |
| Tertiary | 27 | 3.88 | 2.29 | 1.81 | 2.66 | 2.37 | 3.59 | 3.33 | 3.22 | 2.18 | 4.18 | 2.96 | 2.55 | 3.74 | 3.48 | 3.00 | 3.18 | 3.11 | 3.11 |
| | | 1.18 | 1.03 | 1.07 | 1.41 | 1.04 | 1.42 | 1.24 | 1.18 | 1.24 | 1.11 | 1.12 | 1.42 | 1.31 | 1.34 | 1.51 | 1.54 | 1.31 | 1.50 |
| PREVIOUS WORK EXPERIENCE | | | | | | | | | | | | | | | | | | | |
| First job | 34 | 3.00 | 2.70 | 2.38 | 2.47 | 2.67 | 2.70 | 2.79 | 3.76 | 2.47 | 4.11 | 3.52 | 2.82 | 3.32 | 3.26 | 3.85 | 2.79 | 2.76 | 2.94 |
| | | 1.61 | 1.19 | 1.43 | 1.39 | 1.27 | 1.50 | 1.71 | 1.37 | 1.52 | 1.24 | 1.28 | 1.33 | 1.49 | 1.48 | 1.23 | 1.36 | 1.18 | 1.41 |
| Another SOE | 16 | 3.62 | 2.31 | 2.75 | 2.37 | 3.25 | 3.06 | 2.43 | 3.62 | 2.12 | 4.12 | 3.62 | 3.75 | 3.43 | 3.93 | 3.06 | 3.25 | 2.56 | 3.06 |
| | | 1.54 | 1.44 | 1.52 | 1.31 | 1.39 | 1.69 | 1.71 | 1.62 | 1.20 | 1.25 | 1.36 | 1.23 | 1.54 | 1.12 | 1.38 | 1.61 | 1.26 | 1.69 |
| Public sector | 8 | 3.00 | 2.87 | 3.25 | 3.37 | 2.62 | 3.00 | 3.25 | 4.00 | 2.12 | 2.87 | 2.50 | 3.25 | 3.87 | 3.00 | 2.75 | 3.25 | 2.12 | 3.37 |
| | | 1.41 | 1.45 | 1.66 | 1.84 | 1.76 | 1.51 | 1.75 | 1.41 | 1.80 | 1.80 | 1.41 | 1.90 | 1.64 | 1.51 | 1.66 | 1.90 | 1.35 | 1.84 |
| Private sector | 83 | 3.43 | 2.34 | 2.32 | 2.81 | 2.56 | 2.78 | 2.69 | 4.02 | 2.16 | 4.43 | 3.65 | 3.10 | 3.97 | 3.28 | 3.13 | 3.34 | 3.12 | 2.92 |
| | | 1.53 | 1.12 | 1.46 | 1.69 | 1.38 | 1.53 | 1.55 | 1.30 | 1.42 | 1.09 | 1.22 | 1.43 | 1.15 | 1.46 | 1.52 | 1.60 | 1.42 | 1.52 |
| Independent | 30 | 3.30 | 2.00 | 2.46 | 2.66 | 2.76 | 2.86 | 2.43 | 3.96 | 2.16 | 4.06 | 3.73 | 3.26 | 4.03 | 3.00 | 3.33 | 3.56 | 2.83 | 3.13 |
| | | 1.41 | 0.94 | 1.61 | 1.70 | 1.22 | 1.65 | 1.50 | 1.40 | 1.05 | 1.41 | 1.17 | 1.38 | 1.32 | 1.57 | 1.53 | 1.52 | 1.26 | 1.54 |
| SENIORITY | | | | | | | | | | | | | | | | | | | |
| under 10 years | 50 | 3.38 | 2.22 | 2.30 | 2.64 | 2.52 | 2.72 | 2.54 | 3.94 | 2.14 | 4.00 | 3.52 | 2.90 | 3.88 | 3.32 | 3.14 | 3.14 | 2.58 | 3.24 |
| | | 1.52 | 1.03 | 1.44 | 1.66 | 1.37 | 1.53 | 1.48 | 1.25 | 1.38 | 1.48 | 1.29 | 1.43 | 1.45 | 1.42 | 1.51 | 1.64 | 1.38 | 1.47 |
| 11 to 20 | 87 | 3.32 | 2.27 | 2.54 | 2.68 | 2.64 | 3.03 | 2.75 | 3.96 | 2.31 | 4.24 | 3.66 | 3.19 | 3.83 | 3.35 | 3.34 | 3.31 | 3.27 | 2.95 |
| | | 1.46 | 1.16 | 1.52 | 1.65 | 1.34 | 1.66 | 1.59 | 1.38 | 1.43 | 1.23 | 1.14 | 1.50 | 1.24 | 1.47 | 1.47 | 1.56 | 1.26 | 1.59 |
| 21 or more | 54 | 3.27 | 2.57 | 2.38 | 2.62 | 2.79 | 2.57 | 2.51 | 3.83 | 2.05 | 4.44 | 3.46 | 3.37 | 3.57 | 3.16 | 3.33 | 3.14 | 2.51 | 3.00 |
| | | 1.55 | 1.26 | 1.47 | 1.52 | 1.36 | 1.38 | 1.65 | 1.39 | 1.29 | 0.96 | 1.35 | 1.23 | 1.36 | 1.52 | 1.54 | 1.50 | 1.31 | 1.51 |

7. Trenes de Buenos Aires

7.1 Introduction: a frequently postponed start

Following the structure of the previous chapter, an outline of Trenes de Buenos Aires' organisational development will be presented first. Attention will be focused on those facts and figures essential for the understanding of the cultural reorientation.

As mentioned in chapter 2, the metropolitan railway system was divided into seven different lines. On December 23, 1992, the winner of the bidding contest for each of the lines was announced and operations supposed to start in August 1993. On the 1st of January 1994 Metrovías started to operate the first line (plus the subway). After five additional months, the exploitation of four other lines were given over to private companies. The remaining two lines (Mitre and Sarmiento), had in principle been pre-adjudicated to the Metrovías consortium. However, legal struggles between Metrovías, FeMeSA and the Railway Restructuring Unit, and among the shareholders of the consortium themselves, forced the transfer's postponement on four different occasions. Repeatedly during 1994, the parties involved exchanged mutual accusations: the government cited discrepancies among Metrovías' shareholders as the main cause for the delay. Metrovías countered asking for further details on some modifications the government wanted to introduce to the original business proposal (a rescheduling of the investment program). In return, Metrovías asked for a less strict application of penalties (at that time Metrovías was charged \$0.5 m. for deficiencies in the delivery of its subway services) and the re-valuation of cars and locs which, after two additional years under public exploitation, had depreciated. In the beginning of 1995 the Transport Secretary and the Railway Restructuring Unit stated a clear menace and threatened to start a new bidding process. After some weeks elapsed and new shareholders entered Metrovías, the company was renamed and Trenes de Buenos Aires (TBA) founded. On May 27, 1995 TBA started operating the two remaining suburban lines. In the end, only by July 1995 (almost two years after the cargo lines) the metropolitan railway system was completely transferred to private management.

7.2 Trenes de Buenos Aires

TBA's shareholders are Cometrans (an group of well-known, private bus companies from Buenos Aires), Morrison Knudsen (rolling material constructor and refurbisher), both holding 42 % of the shares. Burlington Northern, an American railway operator that is responsible for the technical operation, owns the remaining 16 % (McCaffrey, 1994). Under the (revised) terms of concession, TBA will operate 188 suburban kilometres of the Mitre line and 175 suburban kilometres from the Sarmiento line, both for a period of 20 years (instead of the originally intended 10), renewable in perpetuity for additional 10 year periods. TBA's Mitre tracks run from downtown Buenos Aires to the north, parallel to the de la Plata river. It covers a densely populated area that comprises those suburbs with the highest income level. While the population of the Buenos Aires Federal District (Capital Federal) remained stable for the last 40 years at 3 million inhabitants, Great Buenos Aires, counting some 8 m. inhabitants, is growing at a yearly rate of 100.000 persons (INDEC, 1991). In particular, the northern part of

Buenos Aires is expanding rapidly: new industries and factories are being located there, which in turn attract people to settle in the area.

7.3 Transferred resources

Ferrocarriles handed over to TBA for exploitation 363 kms [188 kms belonging to the Mitre line] of tracks, the buildings and infrastructure belonging to around 97 [57] stations, 470 [227] electrical cars and nearly 50 [22] locs (CNRT, 1997). On the other hand, TBA promised to invest, during the first 15 years of its concession, \$450 m.

Unlike the situation of the cargo lines, the tracks received by TBA from FEMESA were in acceptable condition. Though track maintenance had also been deferred, no substantial efforts had to be made to upgrade them. On the contrary, rolling material was in extremely poor condition due to the complete lack of investment in rehabilitation and periodical overhauls. TBA received from FeMeSA "old Toshiba emus built in 1962 [that are] very far from being in good shape,... they share the same tracks with British emus built in 1930. The non-powered passenger coaches date from the 60s and 70s. They were rebuilt in the 1980s, but they have been allowed to deteriorate so that many now have to be rebuilt for a second time, while the worst will have to be scrapped" (Pipan, 1994).

Signalling also had to be modernised. At both the Sarmiento and Mitre lines mechanical signalling were still in use. TBA planned to re-signal these lines in order to increase the number of trains per hour. With regard to the communication systems, TBA installed track-to-train radios on all its units. At the outset, and until the system was installed, it provided a mobile phone to each conductor.

7.4 Human resources

Shortly before the time of the transfer, FeMeSA counted some 4000 agents. Contrary to the conditions set up for the cargo lines, passenger carriers had no obligation to take on staff from the ranks of FeMeSA or FA. However, since it would not have been possible to make the railway work without some skilled and experienced employees (such as, e.g., train crew or switch operators), TBA took over some 850 former FeMeSA agents. As indicated in Table 7-1, TBA started operations with roughly 3100 employees, thus only 27 % were former public agents. Here again, there was a sharp contrast when compared to the ex-ante situation: taking the Mitre and Sarmiento lines together, in 1988 they employed some 9500 agents – more than three times the current figure. TBA committed considerable efforts in the selection procedures. They started by asking FeMeSA's personnel department for a list of potential candidates that met specific conditions. These requirements varied according to the position, but in general aimed at screening out all employees with records of strong unionism, high absenteeism, health problems, advanced age, and a general "negative" attitude towards the job and company. Out came a list of nearly 2000 candidates which have been interviewed at length by a committee set up ad-hoc by TBA.

Table 7-1
Employees Metropolitan system

| | | Employees Metropolitan system ^{1,2} | | | |
|-----------------|-----------------|--|------|------|------|
| | | 1993 | 1994 | 1995 | 1996 |
| Suburban system | Public (FeMeSA) | 7200 | 5600 | 4500 | - |
| | Private lines | 4400 | 5300 | 5800 | 9695 |
| Mitre line | Public | 3500 | 2020 | 1990 | - |
| | Private (TBA) | - | - | 3100 | 2900 |

¹ Suburban passenger lines (CNRT, 1995, 1996; 1997)

² Data for Suburban system '93, '94 and '95 are approximations

As a consequence of TBA's policy to mainly recruit what they considered to be "uncontaminated" employees from both FEMESA and outside, the demographics of the company's population changed radically. At the time of the survey, TBA's population was on average 34 years old, a reduction of almost ten years when compared to this same figure at FA. The educational level has also been increased as a consequence of TBA's decision only to hire individuals that had finished secondary school.

7.4.1 Further education and development

In accordance with TBA's attitude towards its employees, the HR department invested considerable means and efforts to enhance the abilities of the company's personnel. These efforts started even before operations began: over 700 future employees were given a 4 hour introductory course. Between March and December 1995 over 5500 employees finished one (or more) of the thirteen courses offered, totalling more than 100.000 man-hours. Main targets of the educational effort have been to ensure the safety of operations and to induce a customer orientation (to the Traffic and Marketing Departments went 45 resp. 20 % of the man-hours). In addition, for all those employees affected by the introduction of technologies that required additional skills (e.g., signalling equipment, radio operation, etc.), specific courses were given.

7.4.2 Unionism and Labour agreements

TBA decided to recognise all unions. Besides the workers associations inherited from FeMeSA (Unión Ferroviaria / UF, La Fraternidad / LF, and Asociación Señaleros de FA / ASFA), the company now deals with two new ones, mainly formed by employees directly affected to diverse service activities: Unión de Personal de Servicios (UPS) and Personal de Maestranza (PdeM). With each of these unions the company negotiated a separate labour agreement. Out of such agreements remain some 450 employees, most of them belonging to the organisation's upper echelons. As in most former SOEs, union membership strongly decreased.

The labour agreements closed by TBA (as in all other transferred railway lines), were significantly more flexible and easier to apply. The agreements of LF and ASFA have three resp. four categories, each comprising a single position. The Convención Colectiva de Trabajo (CCT) worked out with the UF has seven categories, each comprising on average 9 positions. Although more specific than other UF agreements, it falls far from the almost 500 positions listed while the Mitre line was a public enterprise. TBA also introduced in all the agreements signed the so-called principles of functional flexibility and polyvalence (*Principio de polivalencia y flexibilidad funcional*). These principles imply the possibility to assign employees -whenever necessary- tasks which are not his or her own (Walter, 1994). The principles of functional flexibility and polyvalence, a common practice in the private sector, were expressly forbidden at Ferrocarriles as well as most other SOEs. However, this policy deleted almost all of the prerogatives stemming from their condition as public agents, the result of many years of unstable top management and strong unions.

The introduction of the principles of functional flexibility and polyvalence implies more than just more freedom for management to deploy employees. It constitutes a radical departure from the production concept that prevailed at Ferrocarriles Argentinos (and all other public enterprises), where work organisation strongly resembled the Taylorist production concept (tpc). Its inherent rigidities¹ were compounded by FA's unions dogmatic attitude towards job classification. Fruytier (1994: 20) defined an analytical opposite to the tpc, labelled "new production concept" (npc). In broad terms, while the tpc tends to divide tasks, the npc only divides labour as far as minimally required. The npc confronts changing requirements by increasing the horizontal and vertical integration of tasks and jobs. On a workplace level this implies horizontal and vertical job enlargement. Horizontal job enlargement means that more tasks (including maintenance and quality control) are incorporated into the same position. Vertical integration on the other hand implies that tasks formerly performed by a higher level are now being done by some lower level position, thus granting more degrees of autonomy and control. In short, with its emphasis on integrating instead of dividing tasks and jobs, the npc brings functional flexibility to the workplace, allowing to better adjust to shifting production requirements.

7.4.3 Remuneration

The changes implemented in the job categories and the introduction of the flexibility principle makes any comparison with the previous situation difficult. Furthermore, at FA there was a wide gap between registered and actually performed working hours. Thus, any comparison would leave out of consideration the concealed fact that whereas FA's agents generally worked less than the stipulated amount of time, compliance is strictly controlled at TBA.

The structure of salaries and wages has been extremely simplified at TBA. For those working under a labour agreement, remuneration is composed of a basic salary and a supplement (*vale alimentario*) worth 20 % of the basic salary. In addition, the CCT stipulates a bonus for seniority, lunch money and a reduced number of particular items for a few specific positions (as, e.g., cashiers and linesmen). When compared with market income levels, TBA's wages and salaries in general are slightly above average. This is a consequence of the HR Department's policy to attract (and retain) qualified agents.

Another interesting and distinctive trait of the remuneration scales TBA worked out with the respective unions, concerns salary amplitude and differentials. In general terms, as shown in Table 7-2, the TBA salary scale shows “increasing increases”, that is, relative larger increases near the top of the scale.

Table 7-2
Salary differentials TBA

| Salary differentials TBA | | |
|---------------------------|--------------|--------------|
| Position ¹ | basic salary | increase (%) |
| Peon Taller | 458 | - |
| Ayudante / auxiliar | 488 | 6 |
| Medio oficial | 540 | 11 |
| Oficial C / calificado | 608 | 13 |
| Oficial B / especializado | 694 | 14 |
| Oficial múltiple | 808 | 14 |
| Oficial A / principal | 923 | 14 |

¹ Based on UF CCTs; positions show a complete career within the mechanical areas. (CCT UF, 1995; TBA 1995)

Especial attention has been given by TBA to build a consistent career ladder, which could be used for the entire time of the concession, without the need to “stretch” it. The passenger carrier has also placed importance to the absolute remuneration in order to avoid agents eschewing higher positions. Surprisingly, they were no items linking salary to gains in productivity or a concept binding overall worker performance with increases in remuneration. Nevertheless, at the time of our survey TBA was starting to design an employee performance appraisal system.

7.5 Business reorientation: customer service

One of the first accomplishments of TBA’s management was to substitute the until then prevalent term “users” (usuarios) by the word “customer” (cliente). But it went much further, underpinning this semantic change with concrete measures and evidence.

Immediately after the transfer an extensive refurbishing program started. After its first year of operations, over 90 trains were rebuilt, incorporating new seats, illumination systems, and skid-proof floors. Less visible for passengers were the upgrading of engines and brake systems. Simultaneously, the conditions of track and signalling were improved. As demonstrated in Table 7-3, the combined effort resulted in a significant decrease in the number of deleted and cancelled trains.

Similar advances have been reached regarding the number of cancelled trains: after reaching the two digits level during FeMeSA’s operation (Galeazzi, 1996), it dropped under TBA to less than 2 percent. The reorientation towards the customer is also reflected in the organisational structure.

Table 7-3
Service regularity TBA

| | | Absolute regularity ¹ (%) | | | |
|-----------------|-----------------|--------------------------------------|------|------|------|
| | | 1993 | 1994 | 1995 | 1996 |
| Suburban system | Public (FeMeSA) | 23 | 23 | 28 | - |
| | Private lines | - | 9 | 6 | 6 |
| Mitre line | Public | 24 | 20 | 25 | - |
| | Private (TBA) | - | - | 9 | 4 |

¹ Late trains (>5') / programmed trains (FeMeSA; CNRT, 1997b)

The Commercial Department reports directly to the company's CEO and, with some 500 employees (22 % of TBA's workforce), it is the second largest unit. Also depending from this Department are two Customer Assistance Centres (CAP) located strategically at the lines' termini. Furthermore, as mentioned above, TBA has invested considerable educational efforts in stressing the importance of the customer and the service provided. Courses dealing about these topics amounted to more than 20.000 man-hours during TBA's first six months of operations.

Operative indicators

TBA's operational efforts lead to positive results immediately. The following Tables summarise the most important figures in this respect.

Table 7-4
Total transported passengers TBA

| | | Transported passengers (Pass. 10 ⁶) | | | |
|-----------------|-----------------|---|------|------|------|
| | | 1993 | 1994 | 1995 | 1996 |
| Suburban system | Public (FeMeSA) | 212 | 183 | 44 | - |
| | Private lines | - | 62 | 302 | 413 |
| | Total | 212 | 245 | 346 | 413 |
| Mitre line | Public | 34 | 38 | 17 | - |
| | Private (TBA) | - | - | 36 | 70 |
| | Total | 34 | 38 | 53 | 70 |

(FeMeSA; CNRT, 1997b)

Table 7-5
Transported Passengers - Kilometres

| | | Transported passenger kilometres (Pass.-Kms 10 ⁹) | | | |
|-----------------|-----------------|---|------|------|------|
| | | 1993 | 1994 | 1995 | 1996 |
| Suburban system | Public (FeMeSA) | 4.2 | 3.5 | 0.9 | - |
| | Private lines | - | 1.4 | 6.1 | 9.2 |
| | Total | 4.2 | 4.9 | 7.0 | 9.2 |
| Mitre line | Public | 0.5 | 0.6 | 0.3 | - |
| | Private (TBA) | - | - | 0.6 | 1.2 |
| | Total | 0.5 | 0.6 | 0.9 | 1.2 |

(FeMeSA; CNRT, 1997b)

As can be recognised from the preceding tables, overall productivity swiftly increased, on average by a factor of 2. According to some internal sources and outside observers (CNRT, 1997b) per-agent productivity grew even stronger and at a more rapid pace.² However, the lack of reliable information concerning the number of employees belonging to the different railway operators that conformed the metropolitan system makes any agent productivity calculations useless. This notwithstanding, the turnaround that followed the transfer in June 1995 is clearly visible, as well as the emergence of higher levels of efficiency.

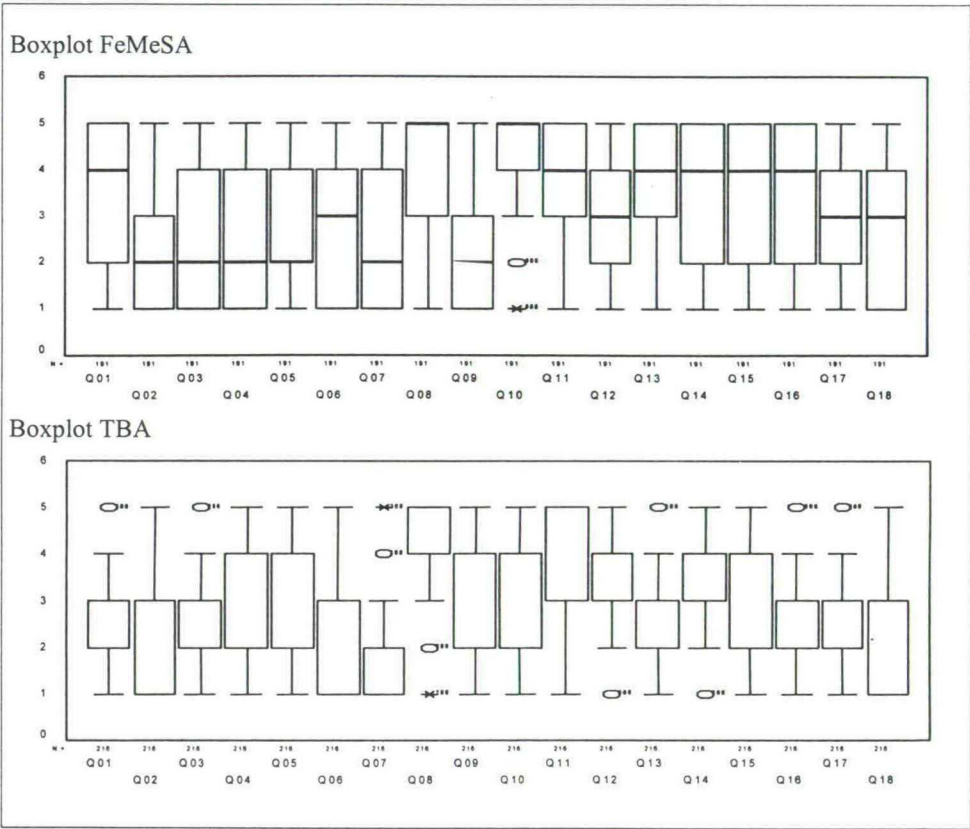
7.6 A cultural diagnosis

In April 1996, ten months after the transfer to the private sector, Hofstede's OCM was administered at TBA. Out of a total population of 2900 employees, 235 participated in the written survey and delivered useful questionnaires. Roughly a third of the respondents (98 questionnaires) belonged to the 850 former FeMeSA agents that had been hired by the private operators.

Following the analytical steps performed in the ex-ante study, TBA's data will first be explored by means of a boxplot.³ Readily observable in Table 7- 6 are –when compared with FeMeSA– the lower levels of dispersion: the interquartile range of fourteen (out of 18) questions were substantially smaller. This trend is corroborated by the actual figures: as can be observed in the Addendum at the end of this chapter, the overall dispersion was significantly reduced, from $\sigma = 1.4$ for the ex-ante measurement to $\sigma = 1.14$ at TBA. Noteworthy too, the boxes did not simply shrink: with only one exception (Q11) the graph shows –often substantial– shifts in the mean value of each question.

With regard to the dispersion of the individual answers, here too this measure will be used as a mean to discover subcultural units. The need to look for specific subunits is foremost derived from the fact that roughly a fourth of TBA's staff had previously been working at the SOE. Thus, to trace shifts in the perceptions of the former public agents, corresponding subsamples have to be analysed separately (e.g., engineers, switch operators).

Table 7-6
 Comparing Boxplots TBA & FeMeSA



However, other groups also had a previously gained common working experience, either at diverse other private companies or as part of a task-force constituted ad-hoc for the bidding process. (e.g., parts of management).

In principle the sample was divided according to the same criteria used for FeMeSA. The different subsamples nevertheless were adapted to the new environment. The criteria employed and the resulting subsamples are listed in Table 7-7. At TBA it was possible to divide the sample according to hierarchy; thus the criterion Echelons“ was added. High management corresponds to the first four tiers (nivel 2-5) and middle managers represent

Table 7-7
Partition criteria TBA

| Partition criteria TBA | | | | |
|---|-------------------------|-----|------|------------------------|
| Criterion | Subsamples | n | code | remarks |
| No criterion | total sample | 235 | | |
| Echelons | high management | 13 | 1 | nivel 2 - 5 |
| | middle management | 29 | 2 | nivel 9 - 12 |
| | lower management | 19 | 3 | nivel 15 - 18 |
| | non-salaried | 174 | 4 | (categorías) |
| Previous employer | Mitre line | 76 | 2 | (6 first-job employees |
| | Sarmiento line | 22 | 3 | left out of analysis) |
| | Public sector | 53 | 4 | |
| | Private sector | 64 | 5 | |
| | Independent | 12 | 6 | |
| Former public | Former public agents | 151 | 1 | (6 first-job employees |
| | All other TBA employees | 76 | 2 | left out of analysis) |
| Former FeMeSA | Former FeMeSA agents | 98 | 1 | |
| | All other TBA employees | 137 | 2 | |
| Union membership (only former FeMeSA employees) | La Fraternidad | 23 | 1 | |
| | Asoc. Señaleros | 17 | 2 | |
| | Union Ferroviaria | 19 | 3 | |
| | disaffiliated | 39 | 4 | |
| Education | Primary school | 32 | 1 | 7 years or less |
| | Secondary school | 138 | 2 | 8 to 12 years or less |
| | Tertiary | 63 | 3 | 13 or more years |
| Age | 39 or less | 79 | 1 | |
| | 40 - 49 | 97 | 2 | |
| | 50 or more | 57 | 3 | |
| Occupation | Conductors | 25 | 1 | |
| | Switch operators | 25 | 2 | |
| | Electricians | 20 | 3 | |
| | Cleansing personnel | 31 | 4 | Integral Clean |
| | Guards | 24 | 5 | |
| | Security | 29 | 6 | Organización Centauro |
| | Inspectors | 18 | 7 | |
| | Managers | 61 | 8 | |
| Gender | Male | 220 | 1 | |
| | Female | 14 | 2 | |

tiers 9 to 12. Lower managers stands for members of tiers 15 - 18, thus including (non-salaried) higher level supervisors. Concerning union membership, subsamples were only built for those unions that existed at FeMeSA; the fourth category includes all former FeMeSA employees that explicitly left their respective union. For obvious reasons the seniority criterion has been left out of analysis. Given our particular interest in the cultural development of the former FeMeSA agents, diverse subsamples were built according to the organisation where TBA's employees had worked before being hired. The criterion "public agents" comprises two groups, one including all TBA employees with a public sector background (Mitre line, Sarmiento line, and other public units), the other group consisting of individuals that had previously worked in a private company or were independent (mostly running their own business). The criterion "former FeMeSA" contrasts those employees admitted from the two former suburban lines (taken together) with all other TBA agents, making no distinction of their previous working experience.

7.6.1 Comparing samples

In this case too, the Levene test was employed to detect whether significant differences among samples do exist. The results show (see Table 7-8) that the dispersion of no subsample differs both significantly and systematically from another group over all –or a majority of– the 18 items.

Table 7-8
Comparison of variances

| Comparison of variances ¹ | | | | | | | | | | | | | | | | | | | |
|--------------------------------------|-----------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| by... | item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| | echelons | | | | | | | * | | | | | | | | * | | | * |
| | prev. work exp. | * | * | | | | * | | | | | | * | | | | * | | * |
| | former public | | | | | | | | | | | | * | | | | * | | * |
| | former FeMeSA | | * | | | | * | | * | | | | * | | * | | | | |
| | union | | * | | | * | * | * | | | | * | * | | | | | * | * |
| | occupation | * | | | | * | * | * | * | * | | | | | | * | | * | * |
| | education | * | | | | | | | | | | | * | | | | | * | |
| | age | | * | | | | * | | | | | | * | * | | | | | * |
| | gender | | | | | | | | | | | | | | | | | | * |

¹ an asterisk means that the dispersion of two groups are significantly different at the $p \leq 0.05$ level.

Though, as mentioned above, the dispersion of no subsample differs significantly on all items, some patterns emerge when looking at the actual scores. These patterns will be analysed in detail in Table 7-9, that shows the dispersion and variance over all 18 items for each of the subsamples generated by a specific criterion (columns $m\sigma$ and $m(s)^2$). Starting from the premise that a strong culture is a homogeneous one (Hofstede, 1990: 302), that is, a culture with low degrees of dispersion, we compared the average dispersion obtained by each subsample. Strong cohesion is found for example within the top echelon (higher management

= 0.92), and members of the two profession – specific unions (both La Fraternidad, for the engineers, and Asociación de Señaleros (ASFA), for the switch operators, score 0.95).

Cultural cohesion is strongest among members of the Legal and the Government relations departments ($m\sigma = 0.77$ resp. 0.84). The explanation for such unusually low scores is easy to find: both departments are rather small, most members of both units have been working together even before the company started its operations, and, finally, almost without exception the departments' employees are lawyers, thus also sharing a common professional outlook. The opposite situation is best exemplified by the subsample "Cleansing personnel", scoring $m\sigma = 1.26$. Respondents of this group belong to "Integral Clean", a semi-external workforce hired exclusively for cleansing duties.

In addition, this kind of analysis allows to estimate if a specific group has retained (when compared to some previous situation) a high degree of cohesion, or lost its common views. Results from the "previous employer" criterion show for example that the former FeMeSA agents retained some cultural elements ($m\sigma = 1.05$), but that a common previous working experience in either the public or private sector does not seem to influence the current collective outlook ($m\sigma = 1.16$ resp. 1.14).

As mentioned before, the sample was divided following diverse criteria in order to detect subcultural units. The resulting subsamples show disparate dispersion levels over the 18 items. The question then is, which criteria to select in order to make reasonable judgements about the true nature of the organisational culture.

Some criteria are more useful than other, and we assume that the criterion that minimises overall dispersion is the most suitable to explain the cultural reality of any organisation. It would be erroneous to draw conclusions about the culture of an organisation on the basis of an unsuitable aggregation criterion. An unsuitable aggregation criterion will generate culturally heterogeneous subsamples showing high levels of dispersion. A useful criterion on the contrary, will build culturally homogenous subsamples. This difference is clearly observable if for example the criteria "age" and "occupation" are compared. Though in principle "age" could divide the sample into homogeneous groups (think of a school), it is highly unlikely that this will take place in a company. Similarly, "gender" does not seem to be a promising criterion in this respect.

On the other hand, criteria such as e.g., "occupation" or "union membership", since dividing the sample following potential lines of personal interactions, could therefore yield more homogeneous subsamples. TBA's data forward some evidence to these assertions. From Table 7-8 can be inferred that "occupation", a criterion dividing the sample into groups according to the respondent's concrete task, shows far more significantly different subsamples than "age" or "gender".

On the last column of Table 7-9, the averages of all the subsamples formed by a single criterion are again averaged (column S_1^2). This latter value can be considered as a (somewhat) raw index of the appropriateness of a given criterion. Nevertheless, this index

Table 7-9
The subsample's dispersion

| The subsample's dispersion ¹ | | | | | |
|---|---------------------|-----|------|--------------------|-----------------------------|
| Criterion | Subsamples | n | mσ | m(s ²) | S ₁ ² |
| No criterion | total sample | 235 | 1.14 | | |
| Echelons | high management | 13 | 0.92 | 0.98 | |
| | middle mgmt. | 29 | 1.08 | 1.22 | |
| | lower management | 19 | 1.08 | 1.20 | |
| | salaried | 174 | 1.10 | 1.37 | 1.32 |
| Previous employer | Mitre line | 76 | 1.06 | | |
| | Sarmiento line | 22 | 1.05 | 1.17 | |
| | Public sector | 53 | 1.16 | 1.36 | |
| | Private sector | 64 | 1.14 | 1.33 | |
| | Independent | 12 | 1.14 | 1.35 | 1.26 |
| Union membership | La Fraternidad | 23 | 0.95 | 0.93 | |
| | Asoc. Señaleros | 17 | 0.95 | 1.01 | |
| | Union Ferroviaria | 19 | 1.15 | 1.40 | |
| | disaffiliated | 39 | 1.08 | 1.20 | |
| | others | 139 | 1.15 | 1.34 | 1.24 |
| Education | Primary school | 32 | 1.19 | 1.45 | |
| | Secondary school | 138 | 1.13 | 1.32 | |
| | Tertiary education | 63 | 1.09 | 1.23 | 1.31 |
| Age | 39 or less | 79 | 1.11 | 1.25 | |
| | 40 – 49 | 97 | 1.13 | 1.31 | |
| | 50 or more | 57 | 1.13 | 1.33 | 1.28 |
| Occupation | Engineers | 25 | 0.96 | 0.95 | |
| | Switch operators | 25 | 1.02 | 1.09 | |
| | Electricians | 20 | 1.12 | 1.33 | |
| | Cleansing personnel | 31 | 1.26 | 1.62 | |
| | Guards | 24 | 1.11 | 1.30 | |
| | Security | 29 | 1.14 | 1.34 | |
| | Administrative | 18 | 1.04 | 1.11 | |
| | High management | 13 | 0.92 | 0.98 | |
| | Middle mgmt. | 29 | 1.08 | 1.22 | |
| | Lower management | 19 | 1.08 | 1.20 | 1.25 |
| Gender | male | 218 | 1.13 | 1.32 | |
| | female | 14 | 1.08 | 1.23 | 1.30 |

(1) S_1^2 is an index of the average variance for unequally large groups, where $S_1^2 = (1/N-J) * [S_1^2 (n_1-1) + S_2^2 (n_2-1) + \dots + S_j^2 (n_j-1)]$. (Diehl and Kohr, 1993:107).

reveals some tendencies. In general, lower scores correspond to criteria that “make sense” from a from a cultural perspective, i.e., those classifications that reflect the possibility of past or present interactions and hence of a common working socialisation. Thus for example, the criterion “occupation” shows a $S_1^2 = 1.045$. Education or gender, on the contrary, present S_1^2 values above 1.30 and thus low cohesion. This is not running against expectations, since the “common programming” that takes place in the group within the organisation is basically unrelated to each agent’s age or basic education.

In summary: low S_1^2 scores seem to be the consequence of a common working socialisation, give an idea of the criterion’s internal logic, and finally allow to reject the less useful criteria. Based on these elements we conclude that for an organisational setting characterised by high levels of heterogeneity, this procedure is a valid mean to approach an organisation’s culture.

7.6.2 Comparing samples:
a new try

Turning back to our main research questions, the mean value scored by the different groups will now be analysed. Given the presence of skewed responses and the violated homogeneity of variance assumption here too the Kruskal-Wallis (resp. the Mann-Whitney) test was employed as non-parametric alternative to the one-way Anova. The results obtained (using similar categories as above) are shown in the following table.

Table 7-10
Comparison of means TBA

| | | Comparison of means ¹ | | | | | | | | | | | | | | | | | |
|-------|----------------|----------------------------------|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| by... | item | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| | echelon | | * | | | | | | | | | * | | | | | | | |
| | job experience | | * | | * | * | * | * | * | | * | * | | * | | * | * | * | |
| | former public | | | | * | * | * | * | * | | * | * | | * | | * | * | * | |
| | former FeMeSA | | | | * | * | * | * | * | | * | * | * | * | | * | * | * | |
| | union | | | | * | * | * | * | * | | * | * | * | * | | * | * | * | |
| | occupation | | * | | * | * | * | * | * | | * | * | * | * | | * | * | * | * |
| | education | | * | * | | | | * | | | * | * | | | | * | | | |
| | age | | * | | * | * | | | | | * | * | | * | | * | | | |
| | gender | | | | | | | | | | | * | | * | | | * | | |

¹ An asterisk meaning that two or more groups are significantly different at the $p \leq 0.05$ level.

A comparison with FeMeSA shows that also at TBA, no subsample differs significantly on all 18 items from another subsample. Contrary to the ex-ante situation, there are far more groups showing significantly different means. Noteworthy is that these groups are unevenly distributed among the diverse criteria and questions. In principle, significant differences appear between the groups formed by those criteria that had a low S_1^2 . To determine the specific groups and eventually find a reason for these differences the Scheffé test was employed. Table 7-11 lists all statistically significant different pairs.

Table 7-11
Significant pairs TBA

| Comparison of means ¹ - (Significant pairs) | |
|--|---|
| criterion | question (specific subsamples) |
| echelons | 3 (4≠1); 11 (3≠4). |
| previous work | 4 (4≠2,3) (5≠3); 6 (5≠3); 10 (3≠4,5) (2≠4); 11 (5≠2); 13 (3≠4,5) 15 (3≠4,5,6) (2≠4,5); 16 |
| experience | (3≠5) (2≠5); 17 (3≠4). |
| union | 5 (3≠1); 12 (2≠3,5); 13 (1≠2). |
| occupation | 2 (1≠3) (3≠5); 4 (1≠7) (3≠4,5,6,7); 5 (1≠4,5,6); 6 (1≠6); 13 (1≠2); 15 (7≠1,5); 18 (2≠8). |
| education | 7 (1≠2); 11 (1≠2,3). |
| age | 4 (1≠3); 10 (1≠3); 11 (1≠2,3); 13 (1≠3); 15 (1≠2). |
| gender | |

¹ Scheffe test: listed between brackets are the subsamples significantly different at the $p \leq 0.05$ level.

Leaving aside those criteria where similar means appear to prevail, a closer look will be thrown upon the groups built based on the previous working experience and the current occupation. Concerning the latter it is interesting to note that in six questions the engineers scored significantly different means when compared to one or more of the other occupations. Though here too, the similarities by far outweigh the differences, it could indicate that as a group, the engineers retained some of their alleged peculiarities. Far stronger is the evidence indicating the existence of significant differences among those stemming from the Sarmiento line and those who prior to join TBA had worked in private enterprises. Both subsamples differ in many items from the other groups and among themselves in questions 4, 6, 10, 13, 15 and 16.

That previously private employees have significantly different views from their colleagues with a background within the public sector is particularly interesting. The issue could reflect the disparity of views fostered as a consequence of having gained previous working experience in a private resp. bureaucratic environment. The issue might seem worth deeper analysis, but it should be noted that if such differences between public and private environments exist, they also had to appear between those stemming from the private sector and those others that worked at the Mitre line or within other units of the public sector. By the same token, significant differences should appear when comparing former public agents with their colleagues stemming from private organisations: they do so, but only in a limited manner.

Interestingly, the contrast between former FeMeSA agents and their colleagues reveals significant differences on 12 questions. This indicates that those TBA employees that were "inherited" by TBA can to a large extent still be differentiated from the rest. On the other hand, the preceding elaboration points out that these differences are not rooted in their common experience as public agents but within the cultural specificity of the suburban passenger lines. In other words, their distinctiveness has less to do with their previous experience within a state-owned-enterprise but is, a-priori, more related to unique cultural

traits fostered by the two metropolitan railway lines. The observed differences could imply that specific cultural traits of FeMeSA regained consistency, at least to the extent required to be differentiable from the rest on particular issues.

7.6.3 Shifts in organisational practices

After having analysed TBA's culture at both the organisational level and several subsections, the remaining part of the chapter will trace shifts in the organisational practices between FeMeSA and TBA. Therefore comparisons will be drawn at different aggregation levels between both companies.

In a first step, the overall culture of both companies is contrasted through a comparison of the respective samples. Since roughly a third of TBA's employees previously worked for FeMeSA, a separate analysis of former FeMeSA agents is conducted in a second step. As noted previously, this subsample was the one that showed statistically significant differences on the largest number of questions. This analysis will contrast former FeMeSA employees with their colleagues at TBA and the total FeMeSA sample.

Finally, two sets of specific matched subsamples will be compared. The first set includes groups of TBA employees mostly or exclusively composed by former public agents: this is the case for the engineers, switch operators and electricians. These samples will be contrasted against the analogous groups of the former SOE. Samples of administrative personnel and of managers constitute the second set. For this latter set, samples of TBA and FeMeSA are functionally equivalent but completely unrelated, i.e., none of the TBA respondents belonged to FeMeSA.

As revealed by Table 7-12, significant differences in the mean score of most questions appear when former FeMeSA agents are contrasted against their colleagues at TBA. This section will analyse the situation of all former FeMeSA agents in comparison with TBA and their prior enterprise. This analysis will be conducted at the level of the complete sample. Only then, in the following section, the development of specific subsamples of former FeMeSA agents within TBA will be studied.

Readily observable from the first column of Table 7-12 is the shift in the consistency in the responses: two thirds of the questions show highly significant differences in their dispersion. Turning to the actual scores found in the Addendum, it is possible to recognise that the level of dispersion has diminished on all questions. Interestingly, the shift towards higher response homogeneity was even stronger among the former FeMeSA agents (column 3 of Table 7-12). This finding allows to conclude that after less than a year time, the company succeeded in reducing the state of cultural anomia in which the former public agents were left by their previous employer.

The reduction in variability was not even along all questions. The three largest differences in dispersion correspond to questions 7 (from 1.3 to 0.7), 16 (from 1.5 to 0.9), and 15 (from 1.5 to 1.0). Noteworthy, these items asked for the employees' perception about cost- and time-consciousness, the criteria for hiring, respectively the relative importance of means and ends.

Table 7-12
Contrasting TBA subsamples

| Contrasting dispersion and means ^{1,2} | | | | | | |
|---|------------|------|------------------|------|---------------|------|
| item | TBA-FeMeSA | | ex FeMeSA-FeMeSA | | ex FeMeSA-TBA | |
| | dispersion | mean | dispersion | mean | dispersion | mean |
| 01 | ** | ** | ** | ** | | |
| 02 | ** | | * | | * | |
| 03 | ** | * | ** | | | |
| 04 | ** | | ** | | | * |
| 05 | | * | | | | * |
| 06 | ** | * | | | ** | * |
| 07 | ** | ** | ** | * | | * |
| 08 | ** | | * | | * | * |
| 09 | * | ** | * | ** | | |
| 10 | | ** | | ** | | ** |
| 11 | | | * | | | ** |
| 12 | ** | | ** | | * | * |
| 13 | | ** | * | ** | | * |
| 14 | ** | | * | | * | |
| 15 | ** | | ** | | | ** |
| 16 | ** | ** | ** | ** | | ** |
| 17 | * | * | * | | | * |
| 18 | ** | ** | ** | ** | | |

¹ Dispersion: Levene test (* = p ≤ 0.05 level, ** = p ≤ 0.01 level)
² Mean: Mann-Whitney U test (* = p ≤ 0.05 level, ** = p ≤ 0.01 level)

The previous comments induces to analyse in detail the mean score obtained for the different questions. As evidenced by the results from the Mann-Whitney test in column 2 of Table 7-12, there is a considerable degree of cultural disparity between both companies' samples. However, the changes are mainly rooted in the incorporation of new personnel: there only have been significant changes in the perceptions of former FeMeSA agents in seven questions (see column 4). The contrast between the former public agents and their colleagues at TBA (last two columns of Table 7-12) reveal that there is little difference in the degree of consistency, but considerable disparity in the perceptions as such.

At a company level, highly significant changes (that is, at the p < 0.01 level) in the mean scores can be detected in an interesting subset of items. Following their numerical ordering, the mean of question 1 shifted by more than one point towards the left pole (see Questionnaire in the Appendix). In other words, the employees perceive that more pressure is now exerted to comply with the customers' wishes (and hence less to follow procedures). The cost- and time-consciousness (question 7) also increased by more than one point, reaching an extremely high score of 1.7. The mean values of questions 9 and 10 are difficult to interpret, since their score shifted towards the centre (2.9 resp. 3.0). In addition, both questions reveal the largest degrees of dispersion. Regarding punctuality, far more employees now perceive that meetings start on time (from 3.7 to 2.6), a fact in line with question 7 and the impression we gained during our

stay at the company. A further significant shift has been detected at item 16; people at TBA perceive that the company is more inclined to use universalistic instead of particularistic criteria in the hiring process. Finally, there is a stronger belief at TBA that each day brings something new and is different from the preceding ones.

Leaving aside the items that shifted towards the central value, the interpretation of those questions that show highly significant changes is unmistakable: they reflect those practices that shifted dramatically and were often underlined by management as those issues where a radical departure from Ferrocarriles' practices were taking place. The first such issue relates to the importance of the customer vis-à-vis the relevance of procedures. The message that customers deserve the highest priority has constantly been repeated and included in the briefing each prospective employee had to go through in order to enter the selection procedure. The same message was also inculcated through the forced use of the term "cliente" (customer) as a substitute for "usuarios" (users), the concept until then prevalent. Much of the rhetoric employed by management was based on the common prejudices about the public sector in general, in particular concerning its disregard for the customer. Nevertheless, their messages have been substantiated by concrete and highly visible actions: at both terminals attractive "customer centres" (CAP) were installed; timeliness was given high priority, as well as the appearance of cars, stations and front-line personnel.

Similarly, the issue of cost- and time-consciousness has constantly been raised in both management's discourse and practice. Of paramount importance in this respect was the fact that employees were compelled to work the full eight hours (and sometimes, particularly during the initial phase, even longer). In addition, and contrary to common practice at Ferrocarriles, there were no idle times, since materials and tools were delivered on time. Particularly in the productive areas, experienced (middle) managers had a clear vision of what needed to be done in terms of cost-containment corrections. During both informal meetings as well as formal collective training continuous attempts were made to raise the employees' level of understanding of the far reaching purposes and consequences of the cost control efforts. The aforementioned managers also had the ability to easily translate their visions into practice, in part –as mentioned in the interviews – because they incubated these thoughts over many years of public administration. In this respect, the experience at TBA confirms the assumption formulated by Turner (1998: 6) that "The leader / manager must convince the members of the organisation to transcend their self-interests ... by constantly focusing attention on the importance of cost-control to the overall mission and goals of the institution".

Highly significant shifts have also been detected regarding the employee's perception about the selection criteria. Here again, management's practice and discourse are very clear and point in the same direction. As mentioned before, FeMeSA agents had to pass several examinations in order to be hired by TBA. Moreover, the term "meritocracy" was frequently employed in the introductory briefings as well as in diverse courses. This obviously stands in sharp contrast with the hiring practices at Ferrocarriles, where the prime criterion was the existence of family links.

Customer orientation, cost- and time-consciousness, and the employment of universalistic hiring procedures: these issues represent those areas where the existing literature points out the main differences between a bureaucratic and a market – oriented organisational

environment (Gordon, 1985). In summary, TBA's practices shifted away from the regulation mentality and towards a culture imbued by a "competitive frame of mind" (Brooke Tunstall, 1985: 53). Not coincidentally, former FeMeSA employees have significantly shifted their perceptions in exactly all those questions that show highly significant shifts when contrasting at the level of the whole sample, i.e., questions 1,7,9,10,13,16, and 18. In other words, the former public agents have adapted to the new working conditions and circumstances. Nevertheless, as stated before, they can still be differentiated from the rest of TBA's population. This fact induces to analyse in further detail what precisely these dissimilarities are.

7.6.4 Comparing the observed shifts

Remarkably, on most of the previously mentioned items (i.e., those questions where TBA obtained highly significant different means when compared to FeMeSA), the former public employees scored closer to the "market-oriented" pole. The question about time- and cost-consciousness (item 7) is illustrative in this respect. This perception shifted from 2.6 (at FeMeSA) to 1.7 at TBA. But while the former agents scored 1.5, their colleagues averaged 2.0 on the same question. Analogous, the mean score for question 10 shifted from 4.2 (company only interested in employee's task) to 3.0 (company interested in employee's welfare) at TBA: in this case, former FeMeSA employees altered their perception by almost 2 points, averaging 2.5; the mean value for the other employees was roughly 3.3. Similar patterns can be detected in all the above-mentioned 7 questions. In other words, on these specific items the former FeMeSA agents "outstrip" their colleagues with other professional backgrounds. The roots of these -in most cases significant- dissimilarities can be traced back to the employee's previous working experiences and are linked to the disparate perceptions raised in different individuals by one and the same fact. For those agents that experienced the bureaucratic nightmare at Ferrocarriles, even small improvements suffice to change their perception. In other words, after years of scarcity, the "marginal" appreciation of specific practices seems to be relatively higher.

In short, former FeMeSA agents perceive their working environment as being customer-oriented, strongly time- and cost-conscious, and rather punctual. They further perceive that the company takes responsibility for their welfare and strongly adhere to the belief that competence is the only criterion in hiring.

Next to the aforementioned, there are other perceived practices in which significant differences can be detected among the former FeMeSA agents and their colleagues at TBA. As revealed by the last column of Table 7-12, statistically significant differences are present in two-thirds of the questions. Thus for example, they have a stronger belief than the rest that in their working environment people think far ahead, give their utmost for the company ($m = 4.4$), and that they talk seriously about the organisation and their duties. At the same time, these employees are somewhat more inclined to endorse that procedures are more important than results.

In summary: the transfer to private hands has generated significant changes in the organisational practices and views of the company's members. Worth noting are a) the sensible increase in the homogeneity of the responses; b) the (often highly significant) shift of

the mean scores towards values that could be considered to be in line with the competitive market the company is now embedded in; c) for most items -and in particular for a set of critical questions- former FeMeSA agents perceive these shifts with stronger intensity than their colleagues with other professional backgrounds.

7.6.5 Specific subsamples of former FeMeSA agents

As mentioned above, this section will analyse specific subsets of former FeMeSA agents. In a first step those groups will be contrasted that have been assumed by the private concessionaires because of their specific knowledge. This is the case for the engineers, switch operators and electricians.

Table 7-13
Former FeMeSA employees at TBA

| Former FeMeSA employees | | | | | |
|-------------------------|--------------|-----------------|---------------------|------------------|--------------------|
| occupations | sample total | former Mitre | former Sarmiento | former FeMeSA | former FeMeSA % |
| conductors | 25 | 20 | 5 | 25 | 100 |
| switch operators | 25 | 19 | 2 | 21 | 84 |
| electricians | 20 | 8 | 7 | 15 | 75 |
| inspectors | 24 | 19 | 2 | 21 | 87 |
| managers | 61 | 10 | 5 | 15 | 25 |
| cleansing personnel | 31 | - | 1 | 1 | 3 |
| other | 49 | - | - | | |
| total | 235 | 76 | 22 | 98 | 41 |

After that, functionally equivalent subsamples of administrative staff and managers will be contrasted. Arrived at this point it is important to specify where the former FeMeSA agents are now working at TBA. In some occupations they make out the complete or a substantial part of the subsample. According to our informant in the HR department, the percentages shown in Table 7-13 roughly correspond to the proportions in the actual population.

As done before, the cultural transformation will mainly be performed by tracing the shifts in the degrees of dispersion and by observing for which specific questions significant changes in the mean score take place. It goes without saying that, given the large degrees of variance present in the FeMeSA sample, the contrasting of means bears only limited significance. Thus, longitudinal comparisons of mean scores will be used in a restrictive manner. Table 7-14 lists the significant shifts in both dispersion and means for the subsamples mentioned above; the actual scores can be found in the Addendum.

Table 7-14
Contrasting former public employees at TBA

| Contrasting means and dispersion ^{1,2} | | | | | | | | | | |
|---|-----------|------|------------------|------|--------------|------|----------------|------|-----------------------|------|
| FeMeSA □ TBA | | | | | | | | | | |
| item | Engineers | | Switch operators | | Electricians | | Administrative | | Managers ³ | |
| | disp. | mean | disp. | mean | disp. | mean | disp. | mean | disp. | mean |
| 01 | | * | ** | | | ** | ** | * | * | * |
| 02 | * | | | | | * | | | * | |
| 03 | | | | | * | | | | | * |
| 04 | | | | ** | | ** | | | | |
| 05 | ** | ** | | | | ** | | | | |
| 06 | ** | ** | | | | | | | | |
| 07 | ** | ** | | | ** | * | ** | | ** | ** |
| 08 | ** | | * | | * | ** | ** | * | | * |
| 09 | | | | | | | * | | | ** |
| 10 | | ** | | ** | * | ** | | * | | * |
| 11 | | | | | | | | | | |
| 12 | * | | | | | | ** | | ** | |
| 13 | | ** | | | | * | ** | | * | |
| 14 | | | * | | | | | | ** | |
| 15 | ** | | | | | | ** | | ** | |
| 16 | ** | ** | | ** | * | * | ** | | ** | |
| 17 | * | | * | | | | | | | |
| 18 | | | | * | | | ** | | ** | |

¹ Levene test: * = $p \leq 0.05$ level, ** = $p \leq 0.01$ level

² Mann-Whitney U test: * = $p \leq 0.05$ level, ** = $p \leq 0.01$ level

³ Managers that previously worked for FeMeSA have been left out of analysis

In general terms, Table 7-14 supports the findings of the previous comparison: the responses of three subsamples saw their dispersion significantly reduced in half the questions. However, in two subsamples (switch operators and electricians) only a handful of questions changed significantly their variance. In other words, the trend towards more response homogeneity is less marked at the level of each professional subgroup than at the level of the whole sample. In any case, though the dynamics of the different subsamples do vary, here too some specific questions show significant reductions in variance in all subsamples. To some extent, they overlap with the questions revealed as “critical” by the comparison done at the company level.

Regarding the shifts in the mean scores, the subsamples show greater disparity: while some groups significantly altered their views on a large number of issues (e.g., engineers, electricians), the perceptions of other subsamples remained fairly stable. In only four questions significant shifts have been detected in the case of the switch operators. The reasons for the response stability of this particular group are multiple, but are mainly rooted in their

lack of interaction with new management and colleagues. This of course is a consequence of the physical location of their working places and the low number of (new) colleagues with a different background. TBA's management is aware of this problem and allotted during 1995-'96 nearly 7500 man-hours of training to members of this profession.

7.7 Summary

In general, 10 months are considered to be a rather short time in terms of cultural transformations. And indeed, there are many issues that remained stable. Nevertheless, the quantitative analysis revealed some cultural transformations, some as mere trends, but others reaching statistical significance.

At the level of the whole company, it is interesting to note both the criteria that enable and preclude the differentiation of subsamples. Thus for example, hierarchical level does not seem to play a relevant role in the formation of the new culture. In contrast, the employee's current occupation, as well as his/her professional background, seem to play a more relevant role in the formation of common understandings.

Noteworthy too is the fact that the only group that can be differentiated from the rest on a large number of questions are the former FeMeSA employees. Considering that roughly a third of TBA's employees were assumed from FeMeSA, this comes as no surprise. However, if due attention is given to the state of cultural anomia present during the final stages of the SOE (and reflected in the large degrees of dispersion), the existing contrast bears additional meaning. It means, among other things, that as a group it regained some consistency. Concerning the former agents' specific responses vis-à-vis the ones from their colleagues, it is interesting to note that in those questions deemed critical they tended to "outstrip" the latter, scoring nearer to the "market-oriented" pole. As mentioned above, such a behaviour might be rooted in the former agents' bureaucratic experience and their stronger appreciation of the changes introduced in the working environment.

Finally, it is necessary to point out that statistically significant changes only took place in a limited number of items. These questions reflect those issues in which the new management – based on common knowledge about SOE's – expected the largest deficiencies and thus centred its efforts. The large shifts detected for these "critical" questions highlight the effectiveness of the efforts conducted by the new managers in order to revert the previous situation.

¹ For a detailed analysis of the rigidities of the tpc see also Sorge and Streeck (1987); Kern and Schumann (1984).

² Employee productivity ratios indicate an increase of over 2.4; their value as indicators is weak since data concerning the number of employees varies significantly among sources.

³ In spite of the results obtained at FeMeSA, we tried to detect whether Hofstede et al. (1990) practices dimensions could be revealed in this sample. Therefore the average score of specific subsamples (in this case too, using "occupation" as criteria) have been analysed. To start with, the correlation coefficient matrix substantially differs from the one calculated for FeMeSA. The absolute number of significant and highly significant correlations increased, a clear indication of the greater links among items. However, the evidence supporting Hofstede's dimensions is rather weak. Out of the 18 expected correlations, only two (items 10 & 04 and 16 and 05) are significantly correlated (at the $p < 0.05$ level). These results notwithstanding, it was decided to test the reliability of the sets.

| factor items | (Cronbach's) Alpha values | | | | | |
|-----------------|---------------------------|---------|---------|---------|---------|--------|
| | P1 | P2 | P3 | P4 | P5 | P6 |
| Alpha (FeMeSA) | 0.1182 | -0.7342 | 0.2717 | -1.6012 | 0.1848 | 0.0790 |
| Alpha (TBA) | 0.5713 | -0.4504 | -2.0504 | -1.5546 | -0.3579 | 0.2661 |

The extremely low (in four cases even negative) Alpha scores obtained strongly suggest not to employ Hofstede's dimensions as a mean to understand TBA's culture.

Addendum 7-1

Correlations Matrix (TBA)

| | | | | | | | | | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| VAR1 | 1.00 | -0.30 | 0.54 | 0.87 | 0.46 | -0.44 | 0.03 | 0.23 | -0.36 | 0.87 | -0.36 | 0.03 | 0.03 | 0.34 | 0.03 | -0.07 | 0.23 | 0.33 | VAR9 |
| VAR10 | -0.30 | 1.00 | -0.76 | -0.60 | 0.50 | 0.17 | 0.78 | 0.76 | 0.08 | -0.40 | 0.08 | -0.75 | -0.73 | -0.73 | 0.83 | 0.73 | -0.74 | 0.01 | VAR8 |
| VAR11 | 0.54 | -0.76 | 1.00 | 0.65 | -0.31 | -0.34 | -0.67 | -0.53 | -0.12 | 0.80 | -0.12 | 0.01 | 0.58 | 0.54 | -0.49 | -0.63 | 0.43 | -0.18 | VAR7 |
| VAR12 | 0.87 | -0.60 | 0.65 | 1.00 | 0.05 | -0.35 | -0.30 | -0.21 | -0.70 | 0.80 | -0.44 | 0.09 | 0.31 | 0.71 | -0.39 | -0.34 | 0.55 | 0.12 | VAR6 |
| VAR13 | 0.46 | 0.50 | -0.31 | 0.05 | 1.00 | -0.44 | 0.64 | 0.89 | 0.43 | 0.41 | -0.06 | 0.18 | -0.65 | -0.53 | 0.76 | 0.64 | -0.46 | 0.60 | VAR5 |
| VAR14 | -0.44 | 0.17 | -0.34 | -0.35 | -0.44 | 1.00 | 0.36 | -0.15 | -0.08 | -0.55 | 0.47 | 0.01 | 0.29 | 0.13 | -0.08 | 0.07 | 0.24 | -0.28 | VAR4 |
| VAR15 | 0.03 | 0.78 | -0.67 | -0.30 | 0.64 | 0.36 | 1.00 | 0.78 | 0.47 | -0.09 | 0.33 | 0.30 | -0.46 | -0.43 | 0.82 | 0.85 | -0.31 | 0.19 | VAR3 |
| VAR16 | 0.23 | 0.76 | -0.53 | -0.21 | 0.89 | -0.15 | 0.78 | 1.00 | 0.64 | 0.04 | -0.11 | -0.05 | -0.81 | -0.73 | 0.83 | 0.64 | -0.70 | 0.53 | VAR2 |
| VAR17 | -0.36 | 0.85 | -0.48 | -0.70 | 0.43 | -0.08 | 0.47 | 0.64 | 1.00 | -0.35 | 0.12 | -0.29 | -0.74 | -0.90 | 0.75 | 0.47 | -0.91 | 0.06 | VAR18 |
| VAR18 | 0.87 | -0.40 | 0.60 | 0.80 | 0.41 | -0.55 | -0.09 | 0.04 | -0.35 | 1.00 | -0.07 | 0.18 | 0.15 | 0.40 | 0.00 | -0.02 | 0.35 | 0.27 | VAR2 |
| VAR2 | -0.36 | 0.08 | -0.12 | -0.44 | -0.06 | 0.47 | 0.33 | -0.11 | 0.12 | -0.07 | 1.00 | 0.38 | 0.38 | -0.01 | 0.26 | 0.41 | 0.25 | -0.21 | VAR1 |
| VAR3 | 0.03 | 0.01 | -0.21 | 0.09 | 0.18 | 0.01 | 0.30 | -0.05 | -0.29 | 0.18 | 0.38 | 1.00 | 0.35 | 0.36 | 0.27 | 0.64 | 0.51 | -0.31 | VAR17 |
| VAR4 | 0.03 | -0.75 | 0.58 | 0.31 | -0.65 | 0.29 | -0.46 | -0.81 | -0.74 | 0.15 | -0.07 | 0.35 | 1.00 | 0.80 | -0.57 | -0.35 | 0.88 | -0.52 | VAR16 |
| VAR5 | 0.34 | -0.49 | 0.54 | -0.39 | -0.53 | 0.76 | 0.64 | -0.46 | -0.90 | 0.40 | -0.01 | 0.36 | 0.80 | 1.00 | -0.65 | -0.37 | 0.94 | -0.38 | VAR15 |
| VAR6 | 0.03 | 0.83 | -0.49 | -0.39 | 0.76 | -0.08 | 0.82 | 0.83 | 0.75 | 0.00 | 0.26 | 0.27 | -0.57 | -0.65 | 1.00 | 0.88 | -0.58 | 0.07 | VAR14 |
| VAR7 | -0.07 | 0.73 | -0.63 | -0.34 | 0.64 | 0.07 | 0.85 | 0.64 | 0.47 | -0.02 | 0.41 | 0.64 | -0.35 | -0.37 | 0.88 | 1.00 | -0.24 | -0.04 | VAR13 |
| VAR8 | 0.23 | -0.74 | 0.43 | 0.55 | -0.46 | 0.24 | -0.31 | -0.70 | -0.91 | 0.35 | 0.25 | 0.51 | 0.88 | 0.94 | -0.58 | -0.24 | 1.00 | -0.29 | VAR12 |
| VAR9 | 0.33 | 0.01 | -0.18 | 0.12 | 0.60 | -0.28 | 0.19 | 0.53 | 0.06 | 0.27 | -0.21 | -0.31 | -0.52 | -0.38 | 0.07 | -0.04 | -0.29 | 1.00 | VAR11 |

Addendum 7-2

Mean value and Standard Deviation by sample (TBA)

| Criterion / sample | n | Q01 | Q02 | Q03 | Q04 | Q05 | Q06 | Q07 | Q08 | Q09 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
|--------------------|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Total | 235 | 2,46 1,13 | 2,23 0,97 | 2,60 1,03 | 2,69 1,34 | 3,09 1,32 | 2,35 1,32 | 1,80 0,93 | 4,14 1,13 | 2,95 1,26 | 2,99 1,22 | 3,64 1,15 | 3,18 0,96 | 2,66 1,19 | 3,35 1,17 | 3,21 1,17 | 2,30 1,01 | 2,46 1,13 | 2,33 1,19 |
| Age | | | | | | | | | | | | | | | | | | | |
| less than 35 | 132 | 2,47 1,09 | 2,22 1,03 | 2,57 1,03 | 2,48 1,26 | 2,83 1,26 | 2,44 1,34 | 1,83 0,94 | 4,16 1,09 | 2,99 1,23 | 3,21 1,20 | 3,36 1,15 | 3,14 0,95 | 2,85 1,17 | 3,37 1,24 | 3,35 1,18 | 2,35 1,02 | 2,53 1,11 | 2,26 1,21 |
| 35 - 49 | 87 | 2,43 1,17 | 2,14 0,78 | 2,60 1,04 | 2,89 1,35 | 3,29 1,30 | 2,24 1,22 | 1,79 0,92 | 4,05 1,24 | 2,76 1,25 | 2,75 1,14 | 3,99 1,02 | 3,31 0,94 | 2,45 1,16 | 3,30 1,13 | 3,05 1,13 | 2,31 1,00 | 2,40 1,16 | 2,42 1,15 |
| 50 or over | 15 | 2,47 1,30 | 2,60 1,12 | 2,80 0,94 | 3,20 1,57 | 4,07 1,33 | 2,13 1,51 | 1,53 0,92 | 4,47 0,83 | 3,53 1,41 | 2,33 1,45 | 4,27 1,03 | 2,87 1,19 | 2,07 1,03 | 3,53 0,74 | 2,86 1,17 | 1,80 0,94 | 2,14 1,23 | 2,33 1,35 |
| Department | | | | | | | | | | | | | | | | | | | |
| Administracion | 36 | 2,66 0,97 | 2,67 0,76 | 3,14 1,02 | 2,94 1,43 | 3,17 1,32 | 2,89 1,30 | 2,03 0,74 | 4,19 0,92 | 2,97 1,00 | 3,28 1,26 | 2,83 1,11 | 2,94 1,00 | 2,91 0,93 | 3,83 0,98 | 3,60 0,91 | 2,71 0,94 | 2,58 0,94 | 2,09 0,97 |
| Trafico | 91 | 2,49 1,08 | 1,96 0,82 | 2,59 1,00 | 2,90 1,31 | 3,40 1,34 | 1,98 1,08 | 1,55 0,76 | 4,34 1,08 | 2,89 1,33 | 2,60 1,22 | 4,02 1,01 | 3,37 0,97 | 2,39 1,23 | 3,20 1,12 | 2,79 1,08 | 2,06 0,96 | 2,20 1,04 | 2,44 1,19 |
| RRHH | 8 | 2,38 0,74 | 1,88 0,83 | 2,13 0,83 | 2,88 0,64 | 3,13 1,36 | 2,63 1,06 | 2,25 0,71 | 3,63 0,92 | 2,25 0,89 | 3,00 0,76 | 2,75 0,89 | 2,75 1,04 | 2,75 1,04 | 3,13 1,13 | 3,38 1,06 | 2,38 0,92 | 2,63 1,06 | 1,50 0,76 |
| Infraestructura | 20 | 2,20 1,06 | 2,90 0,91 | 2,60 0,99 | 3,60 1,27 | 3,25 1,21 | 2,05 1,15 | 1,60 0,94 | 4,45 0,83 | 2,80 1,40 | 2,55 1,39 | 4,00 1,21 | 2,95 1,15 | 2,15 1,04 | 3,45 1,00 | 2,74 1,37 | 1,85 0,93 | 2,37 1,34 | 2,25 1,33 |
| Apoyo | 80 | 2,41 1,29 | 2,20 1,10 | 2,41 1,01 | 2,08 1,16 | 2,65 1,23 | 2,59 1,50 | 1,99 1,11 | 3,86 1,30 | 3,11 1,27 | 3,40 1,04 | 3,56 1,10 | 3,18 0,84 | 2,99 1,20 | 3,32 1,29 | 3,61 1,15 | 2,51 1,04 | 2,71 1,22 | 2,40 1,26 |

Addendum 7-2 (Cont.)

Mean value and Standard Deviation by sample (TBA)

| Criterion / sample | n | Q01 | Q02 | Q03 | Q04 | Q05 | Q06 | Q07 | Q08 | Q09 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
|--------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Education | | | | | | | | | | | | | | | | | | | |
| primary or less | 32 | 2,31 | 2,34 | 2,38 | 3,00 | 3,09 | 2,00 | 1,56 | 4,09 | 3,34 | 2,50 | 4,09 | 3,41 | 2,55 | 3,23 | 2,90 | 2,17 | 2,06 | 2,29 |
| | | 1,35 | 1,04 | 0,98 | 1,34 | 1,30 | 1,22 | 0,95 | 1,35 | 1,38 | 1,30 | 1,06 | 1,19 | 1,31 | 1,15 | 1,30 | 0,95 | 1,11 | 1,27 |
| secondary or less | 111 | 2,47 | 2,07 | 2,49 | 2,55 | 3,01 | 2,29 | 1,74 | 4,07 | 2,79 | 3,10 | 3,75 | 3,20 | 2,74 | 3,33 | 3,11 | 2,20 | 2,55 | 2,41 |
| | | 1,17 | 0,99 | 1,03 | 1,39 | 1,38 | 1,29 | 0,98 | 1,23 | 1,29 | 1,18 | 1,12 | 0,88 | 1,26 | 1,26 | 1,23 | 1,02 | 1,22 | 1,20 |
| tertiary | 92 | 2,49 | 2,37 | 2,82 | 2,74 | 3,17 | 2,55 | 1,96 | 4,24 | 3,00 | 3,02 | 3,35 | 3,09 | 2,61 | 3,43 | 3,43 | 2,47 | 2,49 | 2,24 |
| | | 0,99 | 0,90 | 1,00 | 1,26 | 1,26 | 1,36 | 0,84 | 0,91 | 1,16 | 1,22 | 1,15 | 0,97 | 1,06 | 1,06 | 1,01 | 1,02 | 1,00 | 1,16 |
| Gender | | | | | | | | | | | | | | | | | | | |
| male | 220 | 2,47 | 2,21 | 2,57 | 2,67 | 3,10 | 2,32 | 1,77 | 4,13 | 2,96 | 2,97 | 3,70 | 3,19 | 2,61 | 3,34 | 3,19 | 2,27 | 2,46 | 2,36 |
| | | 1,14 | 0,95 | 1,01 | 1,33 | 1,33 | 1,30 | 0,93 | 1,15 | 1,28 | 1,21 | 1,13 | 0,98 | 1,17 | 1,16 | 1,16 | 1,01 | 1,14 | 1,21 |
| female | 14 | 2,21 | 2,29 | 2,93 | 2,86 | 2,64 | 2,71 | 2,14 | 4,21 | 2,64 | 3,21 | 2,93 | 3,14 | 3,29 | 3,64 | 3,50 | 2,79 | 2,46 | 1,71 |
| | | 0,89 | 1,07 | 1,27 | 1,46 | 1,01 | 1,49 | 0,77 | 0,89 | 0,84 | 1,42 | 1,07 | 0,77 | 1,14 | 1,28 | 1,29 | 0,97 | 1,13 | 0,73 |
| Locality | | | | | | | | | | | | | | | | | | | |
| on train | 49 | 2,44 | 1,76 | 2,43 | 2,76 | 3,29 | 1,88 | 1,41 | 4,12 | 2,88 | 2,69 | 3,90 | 3,31 | 2,28 | 3,23 | 2,55 | 2,04 | 2,33 | 2,23 |
| | | 1,07 | 0,75 | 1,10 | 1,32 | 1,29 | 0,94 | 0,64 | 1,32 | 1,39 | 1,14 | 1,01 | 0,87 | 1,21 | 1,22 | 1,02 | 0,85 | 1,14 | 1,15 |
| along track | 25 | 3,00 | 2,12 | 2,80 | 3,08 | 3,68 | 2,28 | 1,80 | 4,60 | 3,20 | 2,48 | 4,12 | 3,76 | 3,12 | 3,08 | 3,08 | 2,32 | 2,04 | 3,20 |
| | | 0,96 | 0,83 | 0,82 | 1,19 | 1,25 | 1,17 | 0,91 | 0,58 | 1,38 | 1,19 | 0,97 | 1,05 | 0,97 | 1,08 | 1,15 | 1,11 | 0,84 | 1,04 |
| Retiro (HQ) | 80 | 2,30 | 2,35 | 2,75 | 2,70 | 3,10 | 2,45 | 2,00 | 4,24 | 2,91 | 3,18 | 3,23 | 3,04 | 2,64 | 3,54 | 3,56 | 2,36 | 2,42 | 2,01 |
| | | 0,97 | 0,89 | 1,03 | 1,36 | 1,36 | 1,30 | 0,87 | 0,89 | 1,15 | 1,24 | 1,19 | 0,98 | 1,18 | 1,02 | 0,99 | 1,01 | 1,04 | 0,93 |
| diverse (+20km.) | 81 | 2,46 | 2,42 | 2,49 | 2,51 | 2,77 | 2,57 | 1,84 | 3,91 | 2,95 | 3,14 | 3,74 | 3,08 | 2,77 | 3,33 | 3,30 | 2,39 | 2,71 | 2,42 |
| | | 1,31 | 1,11 | 1,03 | 1,37 | 1,26 | 1,50 | 1,07 | 1,30 | 1,25 | 1,20 | 1,14 | 0,91 | 1,20 | 1,28 | 1,26 | 1,07 | 1,24 | 1,35 |

Addendum 7-2 (Cont.)

Mean value and Standard Deviation by sample (TBA)

| Criterion / sample | n | Q01 | Q02 | Q03 | Q04 | Q05 | Q06 | Q07 | Q08 | Q09 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
|--------------------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Occupation | | | | | | | | | | | | | | | | | | | |
| engineers | 25 | 2,54 | 1,84 | 2,48 | 3,32 | 4,04 | 1,64 | 1,32 | 4,56 | 2,60 | 2,52 | 4,16 | 3,56 | 1,87 | 3,38 | 2,48 | 1,75 | 2,08 | 2,42 |
| | | 1,02 | 0,69 | 1,05 | 1,25 | 0,79 | 0,86 | 0,56 | 0,82 | 1,32 | 1,26 | 0,80 | 0,87 | 1,01 | 1,21 | 0,82 | 0,74 | 0,95 | 1,14 |
| switch operators | 25 | 3,00 | 2,12 | 2,80 | 3,08 | 3,68 | 2,28 | 1,80 | 4,60 | 3,20 | 2,48 | 4,12 | 3,76 | 3,12 | 3,08 | 3,08 | 2,32 | 2,04 | 3,20 |
| | | 0,96 | 0,83 | 0,82 | 1,19 | 1,25 | 1,17 | 0,91 | 0,58 | 1,38 | 1,19 | 0,97 | 1,05 | 0,97 | 1,08 | 1,15 | 1,11 | 0,84 | 1,04 |
| clerical | 38 | 2,24 | 2,37 | 2,71 | 2,39 | 3,11 | 2,26 | 1,95 | 4,26 | 3,16 | 3,13 | 3,05 | 3,05 | 2,68 | 3,49 | 3,49 | 2,31 | 2,39 | 2,14 |
| | | 0,95 | 1,02 | 1,09 | 1,26 | 1,37 | 1,22 | 0,96 | 0,92 | 1,33 | 1,21 | 1,21 | 1,00 | 1,23 | 1,15 | 1,02 | 0,92 | 1,08 | 0,83 |
| electricians | 20 | 2,20 | 2,90 | 2,60 | 3,60 | 3,25 | 2,05 | 1,60 | 4,45 | 2,80 | 2,55 | 4,00 | 2,95 | 2,15 | 3,45 | 2,74 | 1,85 | 2,37 | 2,25 |
| | | 1,06 | 0,91 | 0,99 | 1,27 | 1,21 | 1,15 | 0,94 | 0,83 | 1,40 | 1,39 | 1,21 | 1,15 | 1,04 | 1,00 | 1,37 | 0,93 | 1,34 | 1,33 |
| inspectors | 24 | 2,33 | 1,67 | 2,38 | 2,17 | 2,50 | 2,13 | 1,50 | 3,67 | 3,17 | 2,88 | 3,63 | 3,04 | 2,67 | 3,08 | 2,63 | 2,33 | 2,58 | 2,04 |
| | | 1,13 | 0,82 | 1,17 | 1,13 | 1,25 | 0,97 | 0,72 | 1,58 | 1,43 | 0,99 | 1,13 | 0,81 | 1,27 | 1,25 | 1,21 | 0,87 | 1,28 | 1,16 |
| security | 30 | 2,43 | 2,33 | 2,70 | 2,17 | 2,63 | 2,97 | 2,17 | 3,73 | 2,73 | 3,47 | 3,57 | 3,03 | 3,03 | 3,13 | 3,43 | 2,50 | 2,93 | 2,50 |
| | | 1,19 | 1,15 | 0,99 | 1,15 | 1,07 | 1,75 | 1,05 | 1,20 | 0,91 | 1,01 | 1,22 | 0,81 | 1,19 | 1,22 | 1,01 | 0,97 | 1,01 | 1,55 |
| management | 42 | 2,36 | 2,33 | 2,79 | 2,98 | 3,10 | 2,62 | 2,05 | 4,21 | 2,69 | 3,21 | 3,38 | 3,02 | 2,60 | 3,60 | 3,63 | 2,40 | 2,44 | 1,90 |
| | | 0,98 | 0,75 | 0,98 | 1,41 | 1,36 | 1,36 | 0,79 | 0,87 | 0,92 | 1,28 | 1,17 | 0,98 | 1,15 | 0,91 | 0,97 | 1,08 | 1,03 | 1,01 |
| cleaning | 31 | 2,65 | 2,19 | 2,23 | 2,13 | 2,58 | 2,52 | 1,68 | 3,73 | 3,26 | 3,19 | 3,74 | 3,20 | 2,93 | 3,45 | 3,53 | 2,63 | 2,71 | 2,45 |
| | | 1,56 | 1,11 | 1,06 | 1,28 | 1,41 | 1,36 | 1,11 | 1,57 | 1,41 | 1,14 | 1,00 | 0,85 | 1,19 | 1,50 | 1,36 | 1,16 | 1,37 | 1,18 |
| Previous job | | | | | | | | | | | | | | | | | | | |
| first job | 6 | 2,33 | 2,00 | 2,83 | 2,67 | 2,83 | 1,50 | 2,17 | 4,17 | 3,83 | 3,17 | 2,83 | 3,00 | 2,50 | 3,17 | 3,50 | 2,67 | 2,60 | 2,50 |
| | | 0,52 | 1,10 | 0,98 | 1,63 | 1,17 | 0,84 | 0,75 | 0,98 | 1,17 | 0,75 | 1,47 | 1,26 | 1,05 | 1,60 | 1,22 | 1,37 | 1,14 | 1,05 |
| FA | 98 | 2,39 | 2,11 | 2,62 | 3,15 | 3,48 | 2,00 | 1,51 | 4,42 | 2,79 | 2,56 | 4,00 | 3,35 | 2,32 | 3,37 | 2,70 | 1,96 | 2,19 | 2,43 |
| | | 1,10 | 0,87 | 1,02 | 1,28 | 1,25 | 1,06 | 0,76 | 0,95 | 1,28 | 1,17 | 1,04 | 1,02 | 1,16 | 1,05 | 1,06 | 0,92 | 1,08 | 1,24 |
| other public unit | 53 | 2,54 | 2,34 | 2,42 | 2,21 | 2,72 | 2,67 | 2,08 | 3,77 | 3,02 | 3,53 | 3,45 | 3,06 | 2,90 | 3,08 | 3,65 | 2,40 | 2,89 | 2,38 |
| | | 1,11 | 1,09 | 0,99 | 1,24 | 1,34 | 1,52 | 1,02 | 1,29 | 1,29 | 1,14 | 1,20 | 0,91 | 1,15 | 1,35 | 1,05 | 0,79 | 1,05 | 1,22 |

Addendum 7-2 (Cont.)

Mean value and Standard Deviation by sample (TBA)

| Criterion / sample | n | Q01 | Q02 | Q03 | Q04 | Q05 | Q06 | Q07 | Q08 | Q09 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 | Q16 | Q17 | Q18 |
|--------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Previous job | | | | | | | | | | | | | | | | | | | |
| private sector | 64 | 2,47 | 2,30 | 2,75 | 2,45 | 2,77 | 2,72 | 2,05 | 4,09 | 3,00 | 3,14 | 3,30 | 3,08 | 2,97 | 3,54 | 3,49 | 2,66 | 2,40 | 2,14 |
| | | 1,14 | 0,97 | 1,08 | 1,27 | 1,33 | 1,44 | 0,97 | 1,08 | 1,25 | 1,23 | 1,09 | 0,89 | 1,23 | 1,08 | 1,13 | 1,13 | 1,14 | 1,16 |
| independent | 12 | 2,83 | 2,17 | 2,33 | 2,42 | 3,42 | 2,50 | 1,58 | 4,00 | 3,25 | 3,33 | 3,67 | 3,18 | 2,91 | 3,42 | 3,64 | 2,55 | 2,75 | 2,08 |
| | | 1,64 | 0,83 | 0,98 | 1,51 | 1,16 | 0,90 | 1,00 | 1,41 | 0,97 | 1,07 | 1,23 | 0,98 | 0,83 | 1,38 | 1,29 | 1,13 | 1,22 | 1,00 |
| Union | | | | | | | | | | | | | | | | | | | |
| La Fraternidad | 23 | 2,68 | 1,91 | 2,57 | 3,43 | 4,00 | 1,70 | 1,26 | 4,61 | 2,65 | 2,43 | 4,17 | 3,57 | 1,90 | 3,45 | 2,48 | 1,68 | 2,17 | 2,45 |
| | | 0,95 | 0,67 | 1,04 | 1,24 | 0,80 | 0,88 | 0,45 | 0,78 | 1,34 | 1,20 | 0,78 | 0,90 | 1,04 | 1,14 | 0,85 | 0,72 | 0,94 | 1,18 |
| ASFA | 11 | 3,09 | 2,27 | 2,64 | 3,55 | 3,55 | 1,73 | 1,64 | 4,64 | 2,82 | 2,09 | 4,45 | 4,18 | 3,18 | 3,18 | 3,00 | 1,73 | 1,91 | 3,00 |
| | | 1,14 | 0,90 | 0,92 | 1,04 | 1,04 | 1,01 | 0,92 | 0,67 | 1,54 | 1,04 | 0,69 | 0,40 | 1,08 | 0,87 | 1,26 | 0,79 | 0,94 | 1,26 |
| Union Ferrovi. | 19 | 2,05 | 2,16 | 2,26 | 2,63 | 2,89 | 2,00 | 1,26 | 4,16 | 3,05 | 2,16 | 3,79 | 3,11 | 2,00 | 3,21 | 2,37 | 1,74 | 2,32 | 2,16 |
| | | 1,18 | 1,17 | 1,19 | 1,34 | 1,37 | 0,88 | 0,56 | 1,26 | 1,43 | 1,12 | 1,40 | 1,20 | 1,00 | 1,08 | 1,16 | 0,81 | 1,53 | 1,21 |
| disaffiliated | 39 | 2,18 | 2,13 | 2,74 | 3,00 | 3,33 | 2,23 | 1,69 | 4,33 | 2,82 | 2,87 | 3,87 | 3,05 | 2,42 | 3,41 | 2,89 | 2,23 | 2,26 | 2,33 |
| | | 1,05 | 0,86 | 0,97 | 1,27 | 1,36 | 1,25 | 0,86 | 0,98 | 1,19 | 1,13 | 1,06 | 1,00 | 1,24 | 1,07 | 1,09 | 0,99 | 0,98 | 1,24 |
| non affiliated | 139 | 2,51 | 2,30 | 2,59 | 2,40 | 2,83 | 2,60 | 2,00 | 3,96 | 3,04 | 3,31 | 3,39 | 3,09 | 2,91 | 3,35 | 3,57 | 2,55 | 2,64 | 2,24 |
| | | 1,15 | 1,02 | 1,03 | 1,32 | 1,32 | 1,41 | 0,98 | 1,21 | 1,24 | 1,17 | 1,16 | 0,90 | 1,14 | 1,24 | 1,10 | 1,02 | 1,13 | 1,15 |

8. Nuevo Central Argentino

8.1 Introduction

This chapter will draw an outline of NCA's organisational development. The main interest is to present the data required to grasp both the origin and consequences of the cultural reorientation. The first part of the chapter deals with the freight carriers in general and with NCA's relative position when compared to other cargo lines. We will then take a closer look at NCA's organisational and strategic reorientation and present diverse operative and productivity indicators that evidence these changes. Whenever possible, these figures are contrasted with the ex-ante situation. The second part of the chapter discusses the shifts of this line's organisational culture.

As mentioned in chapter 2, FA was first divided into three "businesses". The first calls for tender -intended at the freight sector- were issued in late 1990. Approximately a year later, in November 1991, the first private cargo line was awarded to Ferroexpreso Pampeano SA (FEPSA). By October 1993 five of the six former railway divisions of FA have been privatised.

Before going on, a word of caution must be expressed: in the following lines, several comparisons will be made between the ex-ante and the ex-post situations. The corresponding indices or ratios have, however, only limited value. Though painstaking efforts have been done to cross-check scores and figures, data -foremost of the FeMeSA period- vary substantially between sources. These differences can be traced to -at least- three sources: a) blurred boundaries among FA's six original lines; b) high inflation rates and c) use of different exchange rates for the conversion of Argentinean Australes into U.S. dollars. As a consequence of these shortcomings, in general comparisons will be drawn against the situation before 1989. This allows not only to skip the period where data is more flawed but has the additional advantage that we are comparing against the period in which the traditional FA culture has been formed.

8.2 The Nuevo Central Argentino

On December 22, 1992, the second transfer of a public line took place: the major part of the former Mitre line was granted as a concession for a period of 30 years -with an option for ten additional years- to a consortium of 5 companies: Aceitera General Deheza (food industry), Banco Francés del Río de la Plata (banking), International Finance Corporation (World Bank), Román S.A.C. (transport) and the Asociación de Cooperativas Argentinas Coop. Ltda.. As required by the terms of concession, the consortium is backed by a foreign group responsible for the technical operation. All the group's foreign members are American companies specialised in the development and operation of private railways: Montana Rail Link, Anacostia & Pacific Company Inc., and RBC Associates, Inc.

The NCA network connects Buenos Aires with three central (Buenos Aires, Córdoba and Santa Fé) and two north-western provinces of Argentina (Santiago del Estero, Tucumán). The area covered includes Argentina's three largest industrial centres (Buenos Aires, Córdoba and Rosario, the latter two having each more than 1 m. inhabitants) and rich agricultural and

mineralogical zones. The main products transported are grains, vegetable oils, fruits, sugar, stone, concrete, petroleum, sand, minerals, iron and steel.

Early misfortunes hampered NCA's start up. Originally planned to begin operations on December 1st, difficulties in completing agreements with the government imposed a three week delay. These difficulties were compounded by the fact that NCA was not able to gain control over all facilities, as former public employees refused to accept NCA's control for almost a month. In the words of one of the American managers, "Thus, takeover of the property was more like a military campaign than a corporate transition" (McCaffrey, 1994: 65).

8.3 Transferred resources

Under the terms of concession, Ferrocarriles handed over for exploitation some 4500 km of tracks, the buildings and infrastructure belonging to around 300 stations, 90 locs and more than 5300 wagons. On the other hand, NCA promised to invest, during the first 15 years of its concession, \$450 m.

8.3.1 Tracks

Of the 5480 kms. of track that formerly belonged to the Mitre line as a whole, NCA received 4512 kms. The remaining Mitre tracks were exploited by FeMeSA's suburban operations (188 kms.) or were handed over in December 1992 to the BAP line (780 kms.). The conditions of NCA's tracks constituted no exception and were in poor condition. The company estimated that it had to invest some \$53 m. during the first three years to upgrade them. Though NCA made some progress in this respect, reducing deferred track maintenance in some 2700 kms., the company invested only 15 % of the estimated amount during its first two years of operation.

8.3.2 Rolling material

The power fleet inherited from FA also was in poor state: most of the 63 diesel-electric locomotives had to be upgraded in the company's own workshops near Rosario. According to the Comisión Nacional de Regulación del Transporte (CNRT, 1997a), the regulatory body that oversees the concessionaires, NCA refurbished more than 95 % of its locs and wagons. It is noteworthy that this upgrading of rolling material goes far beyond simple repair tasks. An interesting example in this respect is the equipment for multiple operation: FA never operated locomotives in multiple as a consequence of trade union opposition, who did not accept any reduction in footplate staff. As a matter of fact, all locs had their multiple operation equipment nullified or damaged to inutilisation. NCA started to reinstall the equipment, and it is now possible to operate trains with up to 90 wagons hauled by two or more locs, but driven by only one person. In addition, locs are being fitted with new mechanical and electrical components that allow higher levels of efficiency and reliability. As a direct consequence of these improvements, day-to-day availability of locs reached 80 %, thus between 20 and 50 % higher than under public administration. Furthermore, cabooses have been eliminated and replaced by end-of-train devices, thus additionally reducing train staff requirements.

8.3.3 Communications

From the outset, NCA installed a new radio communication system that allows the immediate communications of all trains with the centralised dispatching office in Rosario. It also implemented a US-style track warrants dispatching system, eliminating the until then existing, anachronical staff system inherited from the time of British administration. NCA also implemented an IBM AS/400 based system to track all of its transportation system from car ordering through delivery, release and empty return. This system has been an integral part of the transportation department's service and provided for smooth relations between its customer service people and the marketing department.

8.3.4 Investments

One of the main criteria employed to evaluate the business propositions submitted for the bidding contest was the amount of the planned investments. Of interest to the central economic authorities was to expand the economy and provide new jobs (the combined promised investment of all private concessionaires was estimated at \$2500 m.). For the concessionaires, it was a mean to increase the number of transported units and the efficiency levels. Finally, for railway employees, the future investments were perceived as a commitment on part of the owners to the company's continuity.

Five years after the first line was transferred, the situation was radically different. On average, the five cargo concessionaires had effected less than half (42 %) the promised investments (CNRT, 1997). No significant improvements in infrastructure have been done and, in general, concessionaires preferred to improve rail conditions through maintenance (Kogan, 1995b). After its third year of operation, NCA only invested 30 % of the assumed \$ 98 m.. According to the private operators, the gap is a consequence of poor cost estimations (they claim to have renovated infrastructure for less money than originally assumed) and of revenues that fall short from the original expectations. To avoid losses, the companies deferred the missing investments. The government, fearing the economic and political costs of a closure, started to bargain with each company. This issue (and afterwards similar ones) started a wave of negotiations between the parties involved that still continues.

8.4 Human resources

As indicated in Table 8-1, NCA started operations with roughly 937 employees. A vast majority –more than 95 % – were former Mitre line agents. The acceptance of such a large number of former public agents was not the consequence of a company decision but of a condition stipulated by the concession contract (that applied to all freight carriers). The number of employees, on the other hand, was decided by the company, and was in sharp contrast with the ex-ante situation: in 1988 some 14500 agents –those belonging to suburban exploitation excluded– worked for the Mitre line (PNUD, 1988).

Contrary to the practices later followed by the commuter operators, that committed considerable efforts in the selection process, procedures at NCA were rather simple: prospective agents had to pass a medical examination and show no records of strong unionism. Nevertheless, during 1993 this figure was again reduced to some 835 employees.

Table 8-1
Employees NCA

| Employees NCA | | | | | | |
|---------------------|------|------|------|------|------|------|
| Sector ¹ | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
| NCA | 618 | 1813 | 4268 | 4035 | 3970 | 3920 |
| | - | 937 | 835 | 884 | 878 | 944 |

¹ Private cargo lines (CNRT, 1995, 1996; 1997)

This process was defined by one of our interviewees as a “weeding-out” and took place, as shown in table 8-2, in other private cargo lines as well. During the next year the number of NCA agents increased and stabilised at around 900 employees.

As a consequence of the contractual restriction and the company’s own policies, the main demographic traits of NCA’s population differ from FA patterns: the mean age was reduced by 5,5 years to around 38. Though specific data was not available, a steep increase in the mean educational level of the new agents has been estimated by the head of the HR department. To date, no significant training measures have been undertaken. Only for those agents affected by the introduction of new technologies that required additional skills (e.g., radio operation, multiple locomotive operation, etc.), specific courses were given.

Thoroughly transformed, on the contrary, were the legal frameworks that regulated the contractual links between employees and company. To start with, NCA decided to recognise only two unions. The internal contradictions of APDFA, the association of managers, become more evident after the privatisation. At NCA, a branch of APDFA never came into existence. ASFA, the workers association of the switch operators, was not recognised by NCA and forced to merge with UF. In the end, only La Fraternidad (for train conductors) and the Union Ferroviaria (UF) survived.

However, their membership (and consequently their strength) has dwindled considerably. While almost all public agents have been union members at FA, only around 60 % of the 600 employees working under a UF labour agreement are still affiliated. Among the roughly 170 conductors, the trend towards deaffiliation is less pronounced: only 10 % have given up their membership. The general trend towards deaffiliation is strong for the following three reasons: a) the wide-spread conviction that the unions and its leaders were to a considerable extent responsible for FA’s economic misery and dissolution, b) the perception that union leaders did little (or nothing) to prevent massive lay-offs, and c) the belief -now that the UF is entering bids for the privatisation of railways- that the union has shifted its main interest away from the railway-worker’s condition. The stronger loyalty by the conductors towards their union is a consequence of LF’s tradition (even at FA) to concentrate in issues of direct relevance to its constituency (e.g., courses and instruction).

8.4.1 Changes in the labour agreements

As mentioned in the previous paragraph, significant changes took place in the legal framework that regulates the contractual links between employees and company. Broadly speaking, the labour agreements (CCT) were thinned out and lost much of their “weight”, speaking both physically as well as metaphorically. Instead of heavy manuals of over 200 pages, NCA has signed a “lean” labour agreement and printed it as a small brochure especially designed to fit into the breast pocket of the employee’s boiler suit.

As a first step, the multitude and diversity of job classifications have been reduced to a few positions. While the labour agreement between FA and UF contained 19 job groups, each one holding on average nearly 25 positions, the new CCT has four broad categories totalling 24 different job positions. As an example: whereas at FA’s Traffic department they were six different types of “auxiliares”¹, these have been merged into one position at NCA. Needless to say, such measures reduced significantly the number of hierarchical levels present at FA. And, simultaneously, they avoided the often heard comment at FA that “the problem over here is that there are too many chiefs and only few indians”. As at TBA, the main transformation however was the introduction of the principles of functional flexibility and polyvalence.

8.4.2 Remuneration

The restructuring of the job categories changed radically the tasks and responsibilities of each job position, again making any comparisons between the remuneration levels before and after privatisation rather useless. Broadly speaking, for a majority of those working under the conditions stipulated by the labour agreements salaries increased between 40 and 80 %. However, as a consequence of the aforementioned strict observance of working time, employees were finding it increasingly more difficult (or outright impossible) to moonlight, an extremely common (and necessary) practice among FA’s agents.

What remains clear is that also at NCA the salary structure has been extremely simplified. Remunerations are now composed of only two concepts: a basic salary and an increase as compensation for the introduction of the principles of functional flexibility and polyvalence. These two items subsume the nearly seventy five different increments, subsidies or bonuses² paid by FA. As in the case of TBA, there were no items linking salary to gains in productivity, a common feature in many other private sector companies. Neither is there a concept binding overall worker performance with increases in remuneration. As a matter of fact, no employee performance appraisal system has been implemented.

There are however, some noteworthy differences among NCA and TBA’s remuneration policies. To start with, employees earn more money at TBA than at NCA. Though the basic salary levels are similar, TBA’s “supplement” increases its salaries roughly 20 %. In addition, NCA’s “viático general” is only worth 50 % of TBA’s “viático por refrigerio”, its functional equivalent. As a consequence, the general remuneration level for similar positions is always higher at TBA. With regard to the amplitude and differentials, both scales show “increasing increases”, that is, relative larger increases near the top of the scale. However, TBA’s amplitude between the extreme positions is wider (see Table 8-2).

Table 8-2
Comparing salary structures

| Position ¹ | Salary differentials | | | |
|---------------------------|----------------------|--------------|--------------|--------------|
| | NCA | | TBA | |
| | basic salary | increase (%) | basic salary | increase (%) |
| Peon Taller | 370 | - | 458 | - |
| Ayudante / auxiliar | 400 | 8 | 488 | 6 |
| Medio oficial | 420 | 5 | 540 | 11 |
| Oficial C / calificado | 470 | 12 | 608 | 13 |
| Oficial B / especializado | 540 | 15 | 694 | 14 |
| Oficial múltiple | - | - | 808 | 14 |
| Oficial A / principal | 630 | 16 | 923 | 14 |

¹ Based on UF CCTs; positions show a complete career within the mechanical areas. (CCT UF, 1995; TBA 1995)

In both cases, especial attention has been given to build a consistent career ladder, which could be used for the entire time of the concession without the need to “stretch” it. In summary, income levels at NCA were lower than at TBA, in part as a reflection of the lower wage level of Rosario – at least when compared with Buenos Aires, where TBA is located.

8.4.3 Labour relations – an overview

It seems appropriate at this point to summarise the main shifts in the labour relations of the unit here under scrutiny. It should be noted, however, that the changes in the working conditions annotated in Table 8-3 also fully apply to TBA (and most of the privatised units throughout the region).

Table 8-3
Shifts in labour relations

| Before Privatisation | After Privatisation |
|---|--|
| ➤ Preferential salaries, additional benefits, significant indirect salary component | ➤ Reduction or cut of additional benefits and indirect salary |
| ➤ Preference in recruitment to family members of employees and unionised workers | ➤ Internships, flexible hiring arrangements, universalistic selection criteria |
| ➤ Internal labour market based on length of service and particularistic criteria (e.g., union, political affiliation) | ➤ Internal labour market based on formal qualifications and experience |

Table 8-3
Shifts in labour relations (cont.)

| Before Privatisation | After Privatisation |
|--|--|
| ➤ Reduced daily working hours; the “right” to work paid overtime; tayloristic production concept | ➤ Flexible hours; the obligation to work (often unpaid) overtime; “new” production concept |
| ➤ Labour stability (de facto tenure); overstaffing, redundancy | ➤ Numerical flexibility; reduction through early retirements, attrition or dismissal |
| ➤ High level of union participation and membership | ➤ Lower level of participation and membership |
| ➤ Uniform union strategies based on claims and demands; antagonism | ➤ Diversified and more defensive strategies; collaboration |
| ➤ Centralised bargaining; sector-wide agreements | ➤ Decentralised bargaining; unit-wide agreements |

Note: adapted and revised from Corradetti (1999); ILO (1994)

8.5 Business reorientation: customer service

The most obvious departure from tradition concerns the customer approach. From the outset, NCA set its headquarters in Rosario, a strategic move that brought it closer to its clients and to the middle of its area of coverage (the former Mitre headquarters have always been in Buenos Aires). NCA set up commercial representatives in all main points of the network, thus ensuring extensive coverage and direct contact to clients. It also offered the possibility to sign long term transport contracts, door-to-door services, storage facilities at the dispatch and delivery points and integrated services (including the final distribution by trucks).

Furthermore, a Customer Service Department was organised that works every day of the year and is able to deliver on-line, real time information to clients regarding the location and status of each car in a given consignment. In addition, train crews were allowed to accept and handle directly the bills of loading from the customers. Though Ferrocarriles had implemented some measures in this direction (e.g., long term contracts since the 1980), its efforts have never been as wide and aggressive.

8.5.1 Operative indicators

NCA’s marketing and operational efforts have contributed to the enhancement of its customer base and the reaching of considerable improvements in performance indices. Table 8-4 summarises the most important figures in this respect. The 2,8 m. Tn transported in NCA’s first year of operations are lower than the average tonnage transported by this line under public administration (roughly 3,2 m. Tn) and fall far from the 4,2 m. Tn estimated by the company (mainly as a consequence of adverse meteorological conditions during early 1993). From 1994 on, demand expanded well above the Mitre line’s average yearly haulage. Even though the gap between NCA’s expected and actually transported tonnage is being reduced, it still lies above 20 % after the company’s fourth year of operations. Similar considerations can

be formulated for the difference between NCA's expected and delivered amount of tonne-kilometres: for 1996 this gap reaches 35 %. The main reasons for the disparity between plan and reality lies in the fierce competition from freight vehicle companies. However, this competition affects stronger those railway companies with short average distances of transportation, since it is on long distances where the comparative advantages of the railways are exploited. With an average transport distance of around 340 kms, NCA has the lowest mean distance of the five cargo lines (sector mean: 500 kms.).

Table 8-4
Transported cargo NCA

| | | Transported units | | | | |
|---------------------|--------------------------|-------------------|-------|--------|--------|--------|
| | unit | 1992 | 1993 | 1994 | 1995 | 1996 |
| Sector ¹ | Tn (10 ³) | 2.065 | 7.004 | 12.036 | 13.835 | 15.359 |
| NCA | Tn (10 ³) | - | 2.837 | 3.476 | 3.533 | 4.109 |
| Sector ¹ | Tn-Km (10 ⁶) | 0.656 | 2.960 | 5.866 | 6.591 | 7.476 |
| NCA | Tn-Km (10 ⁶) | - | 0.946 | 1.190 | 1.165 | 1.398 |
| Mean distance | | | | | | |
| NCA | Km | - | 333 | 342 | 330 | 340 |

¹ Private cargo lines (CNRT, 1997a)

The three indicators analysed above constitute the main variables that influence the company's income. All three of them have been overestimated. The explanation for this disparity lies in a) overoptimistic demand projections (that helped to win the concessions), b) the aforementioned competition against freight vehicles, and c) competition among neighbouring lines. As an obvious consequence, the revenue estimated by NCA in its bidding proposal exceeds by far the actual income: in each of the company's four years of operations real gross income was (slightly more than) half the amount expected (CNRT, 1997a). As mentioned before, these miscalculations motivated NCA to postpone for an indefinite period diverse steps of the original investment program.

8.5.2 Productivity indicators

The data available about employee productivity shows an unambiguous trend when compared to the public era. A rather raw (but often used) index is the amount of employees per km of track. If the figures presented in Table 8-5 are contrasted with the same index from FA, sharp increases in productivity can be noticed. On average, at FA's cargo services 2.31 agents were employed per km of track. Over the last two decades prior to privatisation, the Mitre line constantly had showed the largest number of agents per km. During 1986 (the lowest figure of the series), the Mitre line (suburban employees excluded) scored around 2.75. In other words, for the same 20 km, at the public Mitre line worked 55 agents, while only 4 are being employed by NCA.

A second indicator of productivity indicator is the number of Tonne – Kilometres transported per agent. Partly as a consequence of the decreasing number of agents employed by the sector, this productivity measure is increasing. During 1996 agent productivity rose to an all-time high of 1,907 (cargo lines) and 1,480 Tn-Kms. 10⁶ / agent, a steep increase when compared to Ferrocarriles' average of 0,1 and 0,086 Tn-Kms. 10⁶ / agent for 1980 and 1990 respectively.

Table 8-5
Agent productivity

| Cargo lines - Agent productivity | | | | | | |
|----------------------------------|-----------------------|--------|--------|--------|--------|--------|
| | unit | 1992 | 1993 | 1994 | 1995 | 1996 |
| Sector ¹ | agent-km | 0.1859 | 0.2024 | 0.1913 | 0.1882 | 0.1854 |
| NCA | agent-km | - | 0.1850 | 0.1959 | 0.1995 | 0.2092 |
| Sector ^{1,2} | TU-agent ³ | - | - | 1453 | 1660 | 1907 |
| NCA | TU-agent | - | 1132 | 1346 | 1326 | 1480 |

¹ Private cargo lines ² The index is computed only after all private companies operated for a complete year. Figures for '92 (361) and '93 (693) are misleading because companies have not operated for a full year (see Appendix 2). ³ expressed in Tn-Kms.10⁶ / employees (CNRT, 1997a)

The commercial efforts conducted so far by NCA have paid off: the amount of transported units are increasing. However, as a consequence of the above-mentioned competition against and among other freight carriers, the income per transported Tn-Kms. is decreasing. After taxes, NCA's first fiscal year resulted in a net loss of some \$0.4 m. This trend was reverted after its second and third year, in which it posted a profit of \$1.5 m. resp. \$0.5 m.

Table 8-6
Revenue NCA

| Cargo lines – Revenue | | | | | | |
|--------------------------------------|-------------------------|--------|--------|--------|--------|--------|
| | unit | 1992 | 1993 | 1994 | 1995 | 1996 |
| Sector ¹ | US\$ (10 ⁶) | 19.8 | 75.4 | 141.9 | 152.5 | 164.6 |
| NCA | US\$ (10 ⁶) | - | 26.2 | 31.5 | 30.8 | 31.5 |
| Sector ¹ | US\$-TU | 0.0302 | 0.0247 | 0.0245 | 0.0239 | 0.0236 |
| NCA | US\$-TU | - | 0.0277 | 0.0265 | 0.0265 | 0.0250 |
| Ratio costs to revenues ² | | | | | | |
| Sector ¹ | % | na | 115 | 102 | 99 | na |
| NCA | % | - | 98 | 89 | 94 | na |

¹ Private cargo lines ² Operative costs and genuine income only (CNRT, 1997a)

NCA's overall financial performance (and viability) is above average: only one cargo line (the BAP, linking a strong customer base in Mendoza with Buenos Aires, with an average transported distance above 900 kms.) has a better record. It is noteworthy that NCA has not incurred heavy losses. That would surely have been the case if the company stuck to its original investment program. However, management's swift reaction to stronger-than-expected competition³ led to the investment stop and some lay-offs, and thus prevented the repetition of losses.

8.6 A cultural diagnosis

In May 1995, at about the same time organisational practices were surveyed at TBA, the OCM was also administered at NCA. As mentioned before, together both companies formed the public Mitre line and hence shared, according to some reports (PNUD, 1988; Silverleaf, 1994), various cultural traits. Nevertheless, a number of substantial differences among both units arose after deregulation. The impact these differences have upon the company's culture makes it necessary to enumerate them before going any further in the analysis.

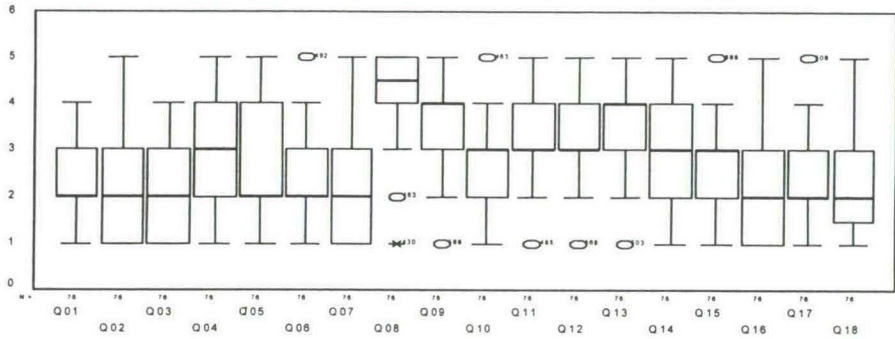
Being a cargo line, NCA was handed over to private exploitation during the first rounds of the deregulation process, in December 1992. Thus by the time of our survey, while TBA was less than a year old, NCA was already being managed outside the public sector for almost three and a half years. A second differential trait of relevance concerns the composition of its workforce. At TBA new personnel was introduced to the largest extent possible; only for those positions where no outside experience was available former public agents were hired. NCA took the opposite stance and filled all positions, leaving aside upper management, with former Ferrocarriles agents. A further difference regards the company's size: with nearly 950 agents, NCA employs roughly a third of TBA's workforce. These disparities, in particular the first two, have an impact on the differential cultural development of NCA and TBA, and require to be taken into special consideration when comparisons between both private concessionaires are drawn.

Given the length of NCA's network (over 4700 km) and, as a result, the accompanying geographical distribution of its members, it was decided to restrict the sample to those employees working in or around Rosario. The location includes NCA's headquarters and its main shop (in Villa Diego). Taken together, in Rosario work some 330 employees, over a third of the company's work force. The statistical analysis of the 87 useful questionnaires will start, as done previously, with an assessment of the resulting boxplot and its comparison with TBA data.

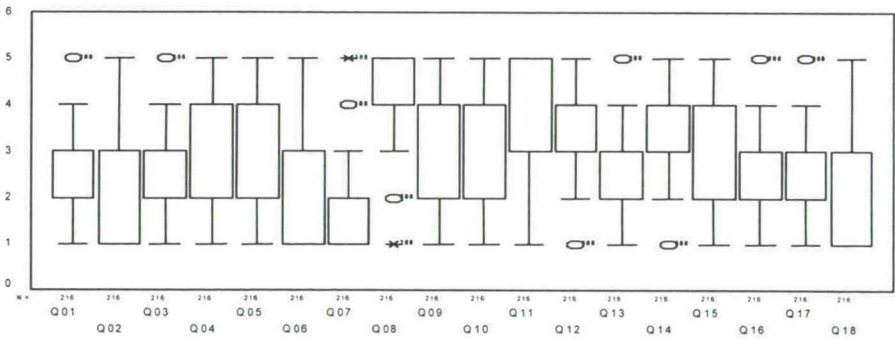
The comparison of NCA's boxplot with the corresponding TBA graph reveals both a further reduction in the degrees of dispersion and a relatively high degree of correspondence in the employees' response patterns. The former trait can also be observed in the Addendum at the end of this chapter: the average dispersion of the total sample was $m\sigma = 1.03$ (TBA $m\sigma = 1.14$). Leaving for later the issue of response similarity among the companies surveyed, the following section will analyse the formation of sub-cultural entities.

Table 8-7
Comparing Boxplots NCA & TBA

Boxplot NCA



Boxplot TBA



8.6.1 Looking for subcultures

Before drawing comparisons with the other two units, NCA's data was examined to detect sub-cultural trends or formations. Therefore the sample was partitioned into categories analogous to those formed for FeMeSA and TBA (see Table 8-8). In general, the response patterns of the generated sub-samples do not diverge substantially one from another. As can be observed from Tables 8-9 and 8-10, dispersion remains stable independently of the stratification criteria employed. Moreover, the Addendum further endorses this assertion and reveals that dispersion remains at relatively low degrees. This is not the case when the sub-samples' mean scores are compared. Significant differences appear whenever criteria reflecting hierarchical levels are taken into consideration. Thus, the largest number of statistically significant differences is obtained when the upper two echelons, comprising both management levels, are compared with all non-managerial employees. As can be observed from Table 8-10, managers and non-managers differ on nine questions, namely items 1, 3, 4,

5, 9, 10, 11, 12 and 16. Among other issues the actual scores indicate that, when compared with non-managers, those occupying the first two levels are more inclined to believe that in their working environment customers have priority over procedures and that people do think far ahead.

Table 8-8
Partition criteria NCA

| Partition criteria NCA | | | | |
|-------------------------------|--------------------------|----|------|--|
| Criterion | Sub-samples | n | code | remarks |
| No criterion | total sample | 87 | | |
| Level and task | High management | 5 | 1 | (Gerencias) |
| | Middle management | 16 | 2 | (Jefaturas) |
| | Administrative | 12 | 3 | |
| | Supervision | 14 | 4 | Of operative workers |
| | Workers | 40 | 5 | Shop and track |
| Previous employer | Ferrocarriles Argentinos | 75 | 1 | ≈ 85 % |
| | Other public unit | 2 | 2 | |
| | Private sector | 7 | 3 | |
| | Independent | 1 | 4 | |
| Labor agreement | La Fraternidad | 15 | 1 | LF and UF only unions recognised by NCA |
| | Union Ferroviaria | 39 | 2 | |
| | Free contract | 33 | 3 | |
| Main divisions (Gerencias) | Operaciones | 39 | 1 | (operate trains) |
| | Infraestructura | 18 | 2 | (tracks & signals) |
| | Logística | 18 | 3 | (locs & wagons) |
| Education | Primary school | 27 | 1 | 7 years or less |
| | Secondary school | 47 | 2 | 8 to 13 years or less |
| | Tertiary | 13 | 3 | 14 or more years |
| Age | 39 or less | 42 | 1 | |
| | 40 – 49 | 43 | 2 | |
| Occupation | Engineers | 15 | 1 | |
| | Stevedores | 14 | 2 | |
| | Mechanics | 12 | 3 | |
| | Track workers | 13 | 4 | |
| | Managers and adm. staff | 33 | 5 | |

Those occupying the first two levels are also more inclined to believe that their colleagues feel at ease in unfamiliar situations and that their private life is not being influenced by the company's norms. Moreover, NCA's managers show a stronger belief in the fact that the company is mainly interested in the employee's performance (and less in his/her welfare), that anyone can fit into the organisation and that competence is the only criterion applied in the hiring process.

The distinctiveness of these two samples to some extent is also reflected in other comparisons, but only as a consequence of criteria similarity. When those employees working under a labour agreement are for example compared with their colleagues with an individual contract, the observed differences are a consequence of the large percentage of managers among the latter sub-sample. The aforementioned distinctiveness is further underlined by the uniformity in the perceptions of other specific groups. Among the non-managerial employees of NCA's three main divisions, for example, no statistically significant difference in their mean values can be detected at all (Table 8-9, column 3).

Table 8-9
Comparing subsamples of NCA (I)

| Contrasting means and dispersion ^{1,2} within NCA | | | | | | |
|--|-----------------------------|-------|---------------------------------------|-------|---------------------------------------|-------|
| item | by type of labour agreement | | unionised vs. non-unionised employees | | non – managers by structural division | |
| | dispersion | means | dispersion | means | dispersion | means |
| 01 | * | | | | | |
| 02 | ** | | * | | | |
| 03 | | | | | | |
| 04 | | | | * | | |
| 05 | | ** | | ** | | |
| 06 | | | | | | |
| 07 | | | | | | |
| 08 | | | | | | |
| 09 | | ** | | ** | | |
| 10 | | ** | | ** | | |
| 11 | | ** | | ** | | |
| 12 | | * | | ** | | |
| 13 | | | | | | |
| 14 | | * | | | | |
| 15 | * | | * | | | |
| 16 | | | | * | | |
| 17 | | * | | ** | * | |
| 18 | | | | | | |

¹ Levene test: * = $p \leq 0.05$ level, ** = $p \leq 0.01$ level

² Mann-Whitney U test: * = $p \leq 0.05$ level, ** = $p \leq 0.01$ level

Assuming the validity of the aforementioned characterisations of public bureaucracies and aware of the descriptions of our interviewees we might conclude that these significant differences are rooted in the disparate professional backgrounds of both groups. Nevertheless,

not all managers have until now worked exclusively outside the public sector. All managers but one (a former high-ranking FA officer) that belong to NCA's top echelon share a trait that at the same time distinguishes them from the non-managers: a previous professional experience outside Ferrocarriles, within the private sector. However, at the second managerial level, the previous working experience is more heterogeneous: while roughly two-thirds previously worked for Ferrocarriles, the other third is composed of former employees of other public units or the private sector.

The issue here under scrutiny has far reaching consequences, because it implies that those former agents that now hold managerial positions have considerably shifted their perceptions about the organisational practices. The magnitude of these changes is evidenced by the fact that nowadays they seem to share more views with those other managers above or beside them, than with their former colleagues working beneath.

Table 8-10
Comparing subsamples of NCA (II)

| Contrasting means and dispersion ^{1,2} within NCA | | | | | | |
|--|------------------------|-------|---------------------------|-------|---------------|-------|
| item | by hierarchical levels | | managers vs. non-managers | | by occupation | |
| | dispersion | means | dispersion | means | dispersion | means |
| 01 | | | | * | | |
| 02 | * | | ** | | ** | |
| 03 | | | | * | | |
| 04 | | | | ** | | |
| 05 | | ** | | ** | | * |
| 06 | | | | | | |
| 07 | * | | | | * | |
| 08 | | | | | | |
| 09 | | ** | | ** | | ** |
| 10 | | ** | | ** | | ** |
| 11 | | ** | * | ** | | ** |
| 12 | | * | | ** | * | |
| 13 | | | | | | |
| 14 | * | * | | | | * |
| 15 | | | ** | | * | |
| 16 | | | | ** | | * |
| 17 | | * | * | | | |
| 18 | | | | | | |

¹ Levene test: * = $p \leq 0.05$ level, ** = $p \leq 0.01$ level

² Mann-Whitney U test: * = $p \leq 0.05$ level, ** = $p \leq 0.01$ level

Be it as a consequence of proximity, the kind of task or other intervening factors, these former agents together with those other managers stemming from the private sector now build a culturally rather homogeneous unit whose views clearly diverge from the perceptions of the non-managers. Good examples to substantiate this comment are those items in which the score difference of the mean is highly significant and, at the same time, the scores lie in

different halves of the scale. This is the case for items 4, 5, 9, 10 and 12. With regard to their attitudes towards planning (question 5), each group tends to follow rather opposite approaches. Needless to add, this difference is not rooted exclusively in the dissimilar previous working environment. To some extent, the difference is also caused by disparities in their tasks and their inherent degrees of responsibility. However, it should be noted that by enhancing the workers' planning horizon, the job enlargement among non-managerial positions will affect (but also be conditioned by) these scores. The observed difference in question 9 indicates that while managers tend to regard private life as not being covered by the organisation, non-managers adhere to the opposite statement. In addition, both groups differ significantly (at the $p < 0.01$ level) on question 16, managers believing competence to be the only criterion in hiring. Hofstede found the latter three questions to form a single dimension that reflects the source of the employee's identity (Hofstede, 1991: 190). Interestingly, all three items coincide, suggesting that non-managers have a rather parochial identity, while managers tend to identify with their profession.

At TBA, the comparison of upper management with the rest of the employees yielded just three items on which the samples diverge significantly. The implications are clear: TBA's management shares far more practices with the rest of the company (there is congruence on 15 items) than NCA's management does (they diverge on half the questions). This contrast could be a consequence of at least three developments: first, its origin could be traced back to the quite opposite hiring policies and the consequently "imported" cultural elements. A second possible explanation lies in the speed and strength with which management operated on particular practices. Finally, as we will see at the end of this chapter, the perceptions of the members of the upper echelons of both organisations are quite dissimilar, NCA's managers holding in some cases even more extreme positions than TBA's power holders.

In brief, after over three years of existence, NCA's employees show reduced variability in the perception of organisational practices. Nevertheless, the perceptions of those occupying higher managerial positions together with those managers working beneath them can be differentiated from all other respondents on half of the questions. A closer look at these differences indicates that while managers at NCA tend to endorse practices that are antithetical to a bureaucratic environment, non-managers still cherish cultural elements that could be considered remnants of Ferrocarriles.

8.6.2 NCA's practices in comparison

In the remaining part of this chapter the practices prevalent at NCA will be contrasted against those present at TBA. Though originally planned, a comparison with FeMeSA's scores will not be conducted. The decision not to include such a comparison is based on the fact that the analysis of FeMeSA demonstrated a state of cultural anomia. Since NCA was created less than a year after the announcement of deregulation, its employees did not witness during their last year at Ferrocarriles the group splitting, depletion, and mergers that characterised FeMeSA's doom. As a consequence, they did not undergo the process of cultural destruction that took place at those units privatised some years later. It thus seems likely that NCA incorporated far more "public" cultural elements, since the company hired almost exclusively former Ferrocarriles' agents, in some cases even complete working gangs. In brief, it would

be erroneous to consider FeMeSA as a (theoretical) point of departure of NCA's culture and, more generally, to compare NCA with FeMeSA.

In spite of the caveats mentioned at the beginning of this diagnosis, the comparison of the two deregulated units forwards some interesting issues. As mentioned above, the variance in the responses of the cargo company were rather small, in most cases even lower than those of TBA. This fact does not run against expectations, since NCA employees had far more time to build common understandings about their working environment. Consistent with this finding, in those five questions where differences in the degree of dispersion between both companies were statistically significant, NCA always scored lower.

Table 8-11
Comparing NCA with TBA

| Contrasting means and dispersion between NCA and TBA | | | | | | | | | | |
|--|--------------------|-------------------|--------------------|------|-----------|------|--------------------------|------|----------|------|
| item | At company level | | Former F.A. agents | | Engineers | | Administrative employees | | Managers | |
| | disp. ¹ | mean ² | disp. | mean | disp. | mean | disp. | mean | disp. | mean |
| 01 | | | | | * | | | | | * |
| 02 | | | | | | | * | | | * |
| 03 | | ** | | ** | | | * | ** | | |
| 04 | ** | * | * | | | | * | * | * | * |
| 05 | | ** | | ** | * | ** | | | | |
| 06 | ** | | | ** | | | | ** | * | |
| 07 | | | ** | | | | | * | | * |
| 08 | ** | | | | | | ** | | | |
| 09 | | * | ** | ** | * | ** | | | | |
| 10 | | | * | | | | * | | | |
| 11 | | | | ** | * | * | | | * | * |
| 12 | | | | | | | | | | |
| 13 | ** | ** | ** | ** | | ** | | * | | ** |
| 14 | | ** | | ** | | | | | * | |
| 15 | * | ** | | | | | | * | ** | |
| 16 | | | | * | | | | | * | ** |
| 17 | | | | | | | | | * | |
| 18 | | | | | | | | | | |

¹ Levene test: * = $p \leq 0.05$ level, ** = $p \leq 0.01$ level
² Mann-Whitney U test: * = $p \leq 0.05$ level, ** = $p \leq 0.01$ level

With regard to their mean values, both units differ statistically on seven items; that is, both companies score similar values in roughly two thirds of the questions. The analogous comparison between TBA and FeMeSA forwarded eleven items in which both units differed significantly. But before all three companies are put in perspective, it is useful to observe in

greater detail the aforementioned differences between both private enterprises. A closer look at the mean values scored on these specific questions (03, 04, 05, 09, 13, 14, and 15) reveals that in comparison to TBA, people at NCA are more inclined to feel uncomfortable in unfamiliar situations, to plan on short term, to believe that newcomers need a long time to feel at home in the company, and to keep meeting times rather loosely. On the other hand, people at TBA adhere with stronger emphasis than their colleagues in Rosario to the belief that the company's norms do not cover the employee's behaviour at home, that in their working environment people do not have difficulties in accepting risks, and that where they work results are more important than procedures.

If these perceptions are confronted, it can be concluded that NCA is more risk - avoiding, looks less far into the future, is less punctual, more closed to outsiders, and finally more process oriented than TBA. Not incidentally, the practices present at NCA recall some traits found in common characterisations of public bureaucracies. These perceptions do not imply that NCA is a bureaucratic environment; they only point out that vis-à-vis TBA, some practices typical for a public administration seem to be more entrenched.

The presence of the above-mentioned differences should not preclude from recognising that both units have far more in common than not. Of utmost relevance is the fact that in most of those questions deemed as "critical" (e.g., customer orientation, cost – consciousness, job competence as main selection criterion), both private companies reveal similar scores. Not incidentally, significant differences in the mean value of precisely those critical questions are present when TBA is compared with the former public enterprise.

In summary: at the level of the whole sample, both private companies score rather similar results. NCA, probably as a consequence of its longer existence, presents lower levels of variance in the responses. TBA on the other hand, seems to have changed more radically its perceptions; residua of what could be considered as "public" practices can be detected at NCA. Leaving for later the analysis of the sources of these differences and remnants, a closer look will now be thrown upon the differences among specific sub-samples of employees of both units.

8.6.3 Contrasting specific sub-samples

For several reasons, a number of specific sub-samples that were present at FeMeSA (and to some extent at TBA) are no longer available at NCA. In most of the cases, this is a consequence of the abolishment of job classifications and the introduction of the principles of functional polyvalence. For the issue here under scrutiny, this fact has two main implications. Foremost, it means that some comparisons can not be made, simply because the jobs were deleted and no longer exist. On the other hand, both job reclassification and the principle of functional polyvalence have profound consequences on the professional identity of most employees, since the distinctiveness of their tasks vanished.

NCA's engineers provide a good example of the above-mentioned assertions. At NCA the position of switch operator was deleted; their tasks are now performed by the engineers themselves. Similarly, other duties (e.g., minor grease and maintenance activities, interaction with customers) are now the responsibility of each driver. As a consequence of these

transformations, role descriptions become less defined, and so does the professional self-perception and esteem of these employees.

As shown in Table 8-11, on only four questions do the engineers diverge significantly from their colleagues. This stands in some contrast to the situation of the drivers at TBA, where they still hold some prerogatives and professional esteem, and clearly deviates from the situation at Ferrocarriles, where engineers were considered as members of a higher order.

8.6.4 Former Ferrocarriles agents at TBA and NCA

In spite of the aforementioned substantial differences among both private operators, it seems necessary to compare the perceptions of their former public agents: though building the majority at NCA, they only make up a small percentage at TBA. Hence, the comparison at the level of the complete samples could conceal relevant information about differences in the development of both groups.

Concerning the dispersion in their answers, the comparison of former public agents shows a similar pattern to the comparison at the level of the complete sample: on almost all items, NCA's former public agents score lower degrees of variance in their responses. The only significant exception concerns the issue of cost-awareness: on question 7, while TBA scores a very low $\sigma = 0.76$, NCA's standard deviation exceeds one. The comparison of mean values shows that in principle, both sub-samples differ on the same questions where the companies as a whole diverged. Interestingly, NCA's former public agents are more inclined to rate their current work environment as closed and secretive, probably a consequence of transferring complete work-groups from Ferrocarriles. On the other hand, TBA's former public agents have a stronger belief that competence is the only criterion in hiring. Particularly this latter difference is readily explainable, since, as mentioned before, employees that entered TBA from FeMeSA had to undergo thorough scrutiny.

A noteworthy exception constitutes question 15 (importance of procedures / results): it is the only item in which both samples (at company level) diverge, but the sub-samples of former public agents do not show a significant difference. On the same question, however, the former FeMeSA agents differ from their colleagues at TBA, which score a higher mean value. In other words, those previously working for the SOE still show stronger adherence to the belief that "organisational procedures are more important than results".

8.6.5 Managers at TBA and NCA

The other sub-sample worth further analysis is management. The members of the upper echelons of both companies diverge on a number of relevant issues. Regarding the variance in their responses, significant differences are present in over a third of the questions. However, no specific trend is observable: no subgroup reveals consistently lower (higher) degrees of variance in their perceptions. Turning to the mean value scores of these two groups, a clear bias emerges. Four of the seven questions in which TBA and NCA managers significantly diverge expose rather clearly the degree of bureaucratic practices in an organisation (01, 02, 07 and, albeit to a lesser extent, question 16). It is precisely in these four questions that NCA managers score nearer to the "non-bureaucratic" pole of the respective item. Thus, there is a

stronger perception among NCA managers that major emphasis is given to meet customer needs, that strong pressure is exerted to finishing one's task, that people in their working environment are aware of costs, and that competence is the only criterion in hiring. It should be noted, however, that on these four questions (as in most others), managers of both private companies score on the same half of the scale. In other words, the differences are more a matter of "shades" than of "colour".

8.7 Summary

In summary, the practices at the cargo line have reached a considerable degree of consistency. Nevertheless, the mean scores draw a cleavage line: the responses of managers and non-managers differ on half the questions. Noteworthy in this respect is the response similarity among managers, independently of their previous working experience. In any case, the members of NCA's upper echelons, in line with their peers at TBA, mostly adhere to practices that match the needs of an organisation embedded in a competitive business environment. Those not belonging to management, on the contrary, still cling to some practices that could be considered remnants of the public past. In this regard it is important to note that, leaving aside two lower level employees, all non-managers stem from Ferrocarriles. In order to be able to determine if the professional background or other intervening factors were the source of the detected differences and shifts, the next chapter will put in comparative perspective the three units surveyed.

¹ Auxiliar de cabecera, Especial A, Especial B, de 1a, de 2da, de 3ra and finally Auxiliar ayudante (UF, Convencion Colectiva de Trabajo 21/75, 1986).

² Bonificaciones, Adicionales, Retribuciones especiales and Subvenciones (arts. 33 ssgs. CCT UF 21/75 1986)

³ This swift reaction can also be partially understand as a consequence of the awareness that figures from the original bidding proposal were somewhat unrealistic.

Addendum 8-1

Mean value and Standard Deviation by sample (NCA)

| Criterion / sample | n | q01 | q02 | q03 | q04 | q05 | q06 | q07 | q08 | q09 | q10 | q11 | q12 | q13 | q14 | q15 | q16 | q17 | q18 |
|----------------------------|----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Total | 87 | 2,41 1,00 | 2,01 0,87 | 2,18 0,98 | 2,97 1,10 | 2,64 1,18 | 2,45 1,03 | 1,83 1,00 | 4,34 0,81 | 3,56 1,08 | 2,79 0,99 | 3,45 1,10 | 3,10 0,97 | 3,69 0,94 | 2,79 1,10 | 2,81 1,05 | 2,21 0,98 | 2,55 1,18 | 2,44 1,18 |
| Labor agreement | | | | | | | | | | | | | | | | | | | |
| La Fraternidad | 15 | 2,60 0,63 | 1,87 0,83 | 2,40 1,12 | 3,20 1,08 | 3,00 1,13 | 1,93 1,10 | 1,67 0,82 | 4,27 1,16 | 3,80 0,86 | 2,13 0,74 | 3,33 1,18 | 3,40 1,06 | 3,64 0,74 | 3,27 0,96 | 2,40 0,51 | 2,40 1,06 | 2,20 0,77 | 2,60 1,35 |
| Unión Ferroviaria | 39 | 2,49 1,14 | 1,95 1,02 | 2,05 1,00 | 3,18 1,05 | 2,03 0,99 | 2,58 0,98 | 1,79 1,10 | 4,41 0,79 | 4,03 0,93 | 2,62 0,96 | 3,03 1,01 | 3,31 0,83 | 3,82 0,93 | 2,44 1,07 | 2,84 0,93 | 2,37 0,88 | 2,31 1,15 | 2,44 1,21 |
| free contract | 33 | 2,22 0,94 | 2,15 0,67 | 2,24 0,90 | 2,59 1,10 | 3,21 1,08 | 2,55 1,00 | 1,94 0,97 | 4,28 0,63 | 2,91 1,01 | 3,30 0,88 | 4,00 0,94 | 2,72 0,99 | 3,55 1,03 | 3,00 1,10 | 2,97 1,31 | 1,94 1,01 | 3,00 1,25 | 2,38 1,10 |
| under agreement (lf+uf) | 54 | 2,52 1,02 | 1,93 0,97 | 2,15 1,04 | 3,19 1,05 | 2,30 1,11 | 2,40 1,04 | 1,76 1,03 | 4,37 0,90 | 3,96 0,91 | 2,48 0,93 | 3,11 1,06 | 3,33 0,89 | 3,77 0,88 | 2,67 1,10 | 2,71 0,85 | 2,38 0,92 | 2,28 1,05 | 2,48 1,24 |
| Divisions | | | | | | | | | | | | | | | | | | | |
| Operations | 39 | 2,46 0,94 | 1,87 0,83 | 2,36 1,04 | 2,92 1,11 | 2,79 1,24 | 2,31 1,03 | 1,59 0,79 | 4,38 0,91 | 3,54 1,10 | 2,59 1,02 | 3,46 1,19 | 3,34 0,94 | 3,71 0,96 | 3,00 1,19 | 2,72 0,89 | 2,03 0,99 | 2,38 1,09 | 2,59 1,25 |
| Infrastructure | 18 | 2,29 1,21 | 2,33 1,08 | 1,78 0,73 | 3,00 1,19 | 2,56 1,25 | 2,18 0,73 | 1,56 0,78 | 4,50 0,62 | 3,89 0,96 | 2,56 1,04 | 3,17 1,10 | 2,94 1,26 | 3,75 0,77 | 2,33 1,08 | 2,67 1,19 | 2,35 1,00 | 2,28 1,02 | 2,53 1,28 |
| Logistics | 18 | 2,50 1,04 | 1,67 0,69 | 2,39 1,09 | 2,88 1,22 | 2,28 1,07 | 2,94 1,06 | 1,94 1,30 | 4,24 0,90 | 3,72 1,13 | 3,11 0,96 | 3,22 0,81 | 3,11 0,76 | 3,76 1,03 | 2,71 1,05 | 3,25 1,00 | 2,29 0,77 | 2,61 1,54 | 2,11 0,96 |
| Levels | | | | | | | | | | | | | | | | | | | |
| higher management | 5 | 1,40 0,55 | 1,80 0,45 | 2,80 0,45 | 2,00 1,22 | 4,40 0,55 | 2,00 0,71 | 1,60 0,55 | 4,80 0,45 | 2,20 1,10 | 3,80 0,45 | 4,20 0,45 | 1,80 0,84 | 2,60 1,34 | 3,20 1,10 | 4,00 1,22 | 1,20 0,45 | 4,40 0,55 | 1,80 0,84 |

Addendum 8-1 (Cont.)

Mean value and Standard Deviation by sample (NCA)

| Criterion / sample | n | q01 | q02 | q03 | q04 | q05 | q06 | q07 | q08 | q09 | q10 | q11 | q12 | q13 | q14 | q15 | q16 | q17 | q18 |
|----------------------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| middle management | 16 | 2,00 | 1,94 | 2,44 | 2,27 | 3,31 | 2,19 | 1,50 | 4,27 | 2,88 | 3,25 | 4,00 | 2,67 | 3,86 | 2,86 | 3,00 | 1,67 | 2,62 | 2,53 |
| | | 0,85 | 0,68 | 1,03 | 1,03 | 1,01 | 0,98 | 0,73 | 0,70 | 1,02 | 1,06 | 0,89 | 1,05 | 0,86 | 1,35 | 1,41 | 0,82 | 1,36 | 1,19 |
| (total management) | 21 | 1,85 | 1,90 | 2,52 | 2,20 | 3,57 | 2,14 | 1,52 | 4,40 | 2,71 | 3,38 | 4,05 | 2,45 | 3,53 | 2,95 | 3,24 | 1,55 | 3,05 | 2,35 |
| | | 0,81 | 0,62 | 0,93 | 1,06 | 1,03 | 0,91 | 0,68 | 0,68 | 1,06 | 0,97 | 0,80 | 1,05 | 1,12 | 1,27 | 1,41 | 0,76 | 1,43 | 1,14 |
| administrative | 12 | 2,83 | 2,58 | 1,75 | 3,25 | 2,58 | 3,25 | 2,67 | 4,08 | 2,25 | 3,17 | 3,92 | 3,17 | 3,58 | 3,08 | 2,50 | 2,58 | 2,92 | 2,42 |
| | | 0,83 | 0,51 | 0,62 | 0,87 | 0,90 | 0,75 | 0,98 | 0,51 | 0,87 | 0,72 | 1,16 | 0,72 | 0,90 | 0,79 | 1,00 | 1,08 | 0,90 | 1,08 |
| supervision | 14 | 2,43 | 2,36 | 2,14 | 2,79 | 2,21 | 2,57 | 1,21 | 4,29 | 4,29 | 2,36 | 2,50 | 3,07 | 3,85 | 2,64 | 2,62 | 1,93 | 2,86 | 2,29 |
| | | 1,28 | 1,15 | 0,95 | 1,12 | 0,89 | 0,76 | 0,43 | 0,91 | 0,73 | 0,84 | 0,94 | 0,83 | 0,99 | 0,84 | 1,04 | 0,83 | 1,17 | 1,33 |
| workers | 40 | 2,55 | 1,78 | 2,15 | 3,33 | 2,33 | 2,33 | 1,95 | 4,40 | 3,85 | 2,52 | 3,33 | 3,42 | 3,74 | 2,68 | 2,74 | 2,54 | 2,07 | 2,55 |
| | | 0,93 | 0,86 | 1,08 | 1,00 | 1,19 | 1,13 | 1,11 | 0,90 | 0,95 | 0,96 | 1,02 | 0,90 | 0,85 | 1,19 | 0,79 | 0,91 | 0,94 | 1,22 |
| (total non-managers) | 66 | 2,58 | 2,05 | 2,08 | 3,20 | 2,35 | 2,55 | 1,92 | 4,32 | 3,83 | 2,61 | 3,26 | 3,30 | 3,73 | 2,74 | 2,67 | 2,42 | 2,39 | 2,47 |
| | | 0,99 | 0,94 | 0,98 | 1,01 | 1,07 | 1,05 | 1,07 | 0,84 | 0,94 | 0,93 | 1,11 | 0,86 | 0,88 | 1,06 | 0,87 | 0,95 | 1,05 | 1,21 |
| Occupation | | | | | | | | | | | | | | | | | | | |
| engineers | 15 | 2,60 | 1,87 | 2,40 | 3,20 | 3,00 | 1,93 | 1,67 | 4,27 | 3,80 | 2,13 | 3,33 | 3,40 | 3,64 | 3,27 | 2,40 | 2,40 | 2,20 | 2,60 |
| | | 0,63 | 0,83 | 1,12 | 1,08 | 1,13 | 1,10 | 0,82 | 1,16 | 0,86 | 0,74 | 1,18 | 1,06 | 0,74 | 0,96 | 0,51 | 1,06 | 0,77 | 1,35 |
| Guarda y estiba | 14 | 2,36 | 1,79 | 2,29 | 3,00 | 2,14 | 2,71 | 1,64 | 4,57 | 3,79 | 2,71 | 3,14 | 3,43 | 4,00 | 2,86 | 2,79 | 1,93 | 2,43 | 2,50 |
| | | 1,08 | 0,89 | 1,14 | 0,96 | 1,10 | 0,91 | 0,84 | 0,76 | 1,05 | 0,99 | 1,23 | 0,85 | 0,96 | 1,17 | 0,80 | 0,83 | 1,16 | 1,22 |
| mechanics | 12 | 2,67 | 1,67 | 2,00 | 3,25 | 1,75 | 2,83 | 2,08 | 4,17 | 4,08 | 2,75 | 2,92 | 3,08 | 3,83 | 2,42 | 3,10 | 2,64 | 2,42 | 1,92 |
| | | 1,07 | 0,78 | 1,13 | 1,14 | 0,62 | 1,19 | 1,56 | 0,94 | 1,00 | 0,87 | 0,67 | 0,51 | 1,03 | 1,00 | 0,74 | 0,67 | 1,38 | 1,00 |
| track workers | 13 | 2,46 | 2,38 | 1,85 | 3,31 | 2,15 | 2,17 | 1,69 | 4,46 | 4,23 | 2,38 | 3,00 | 3,38 | 3,58 | 2,00 | 2,69 | 2,62 | 2,08 | 2,85 |
| | | 1,33 | 1,26 | 0,69 | 1,11 | 1,14 | 0,72 | 0,85 | 0,66 | 0,73 | 1,04 | 1,08 | 1,04 | 0,79 | 0,91 | 1,18 | 0,96 | 0,95 | 1,28 |
| administrative | 33 | 2,22 | 2,15 | 2,24 | 2,59 | 3,21 | 2,55 | 1,94 | 4,28 | 2,91 | 3,30 | 4,00 | 2,72 | 3,55 | 3,00 | 2,97 | 1,94 | 3,00 | 2,38 |
| | | 0,94 | 0,67 | 0,90 | 1,10 | 1,08 | 1,00 | 0,97 | 0,63 | 1,01 | 0,88 | 0,94 | 0,99 | 1,03 | 1,10 | 1,31 | 1,01 | 1,25 | 1,10 |

Addendum 8-1 (Cont.)

Mean value and Standard Deviation by sample (NCA)

| Criterion / sample | n | q01 | q02 | q03 | q04 | q05 | q06 | q07 | q08 | q09 | q10 | q11 | q12 | q13 | q14 | q15 | q16 | q17 | q18 |
|--------------------------|----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Age | | | | | | | | | | | | | | | | | | | |
| 1 | 42 | 2,45 | 2,05 | 2,19 | 3,07 | 2,45 | 2,61 | 1,93 | 4,44 | 3,67 | 2,74 | 3,48 | 3,29 | 3,68 | 2,59 | 2,67 | 2,29 | 2,43 | 2,37 |
| | | 0,94 | 0,96 | 0,99 | 1,05 | 1,04 | 1,00 | 1,09 | 0,63 | 0,98 | 1,04 | 1,06 | 0,94 | 0,89 | 1,14 | 0,98 | 1,05 | 1,09 | 1,11 |
| 2 | 43 | 2,33 | 1,95 | 2,16 | 2,86 | 2,79 | 2,30 | 1,74 | 4,26 | 3,42 | 2,88 | 3,49 | 2,93 | 3,73 | 2,93 | 2,95 | 2,14 | 2,70 | 2,49 |
| | | 1,05 | 0,79 | 1,00 | 1,16 | 1,30 | 1,06 | 0,93 | 0,95 | 1,16 | 0,96 | 1,12 | 0,97 | 0,98 | 1,05 | 1,14 | 0,90 | 1,28 | 1,26 |
| Educational level | | | | | | | | | | | | | | | | | | | |
| primary | 27 | 2,15 | 2,00 | 2,40 | 3,30 | 1,95 | 2,58 | 1,50 | 4,55 | 3,95 | 2,65 | 3,30 | 3,30 | 3,70 | 2,50 | 2,74 | 2,21 | 2,30 | 2,25 |
| | | 1,09 | 1,17 | 0,99 | 0,92 | 1,05 | 0,90 | 0,76 | 0,76 | 1,00 | 1,18 | 1,08 | 0,80 | 1,03 | 1,24 | 0,93 | 0,79 | 1,08 | 1,21 |
| secondary | 47 | 2,64 | 2,04 | 2,02 | 2,98 | 2,72 | 2,43 | 1,98 | 4,28 | 3,67 | 2,74 | 3,31 | 3,23 | 3,88 | 2,75 | 2,75 | 2,32 | 2,41 | 2,57 |
| | | 0,94 | 0,80 | 0,94 | 1,11 | 1,07 | 1,13 | 1,11 | 0,82 | 0,97 | 0,96 | 1,13 | 0,93 | 0,80 | 1,01 | 0,98 | 1,07 | 1,07 | 1,23 |
| tertiary | 13 | 1,85 | 1,92 | 2,54 | 2,33 | 3,38 | 2,38 | 1,69 | 4,23 | 2,54 | 3,23 | 4,23 | 2,31 | 2,92 | 3,38 | 3,15 | 1,77 | 3,54 | 2,23 |
| | | 0,80 | 0,64 | 1,05 | 1,15 | 1,33 | 0,77 | 0,75 | 0,83 | 1,05 | 0,73 | 0,60 | 1,03 | 0,95 | 1,12 | 1,46 | 0,73 | 1,33 | 0,93 |
| Previous employer | | | | | | | | | | | | | | | | | | | |
| Ferrocarriles Argentinos | 75 | 2,55 | 2,01 | 2,11 | 3,12 | 2,51 | 2,55 | 1,83 | 4,36 | 3,71 | 2,68 | 3,35 | 3,15 | 3,70 | 2,74 | 2,66 | 2,25 | 2,47 | 2,46 |
| | | 0,97 | 0,89 | 0,97 | 1,02 | 1,08 | 1,00 | 1,04 | 0,73 | 0,96 | 0,95 | 1,10 | 0,94 | 0,85 | 1,08 | 0,97 | 0,95 | 1,09 | 1,22 |

9. Integrating experiences

9.1 Introduction

Here arrived, it is necessary to compare the cultural transition of both private operators and to integrate their experiences. It is precisely at this point where the advantages of the quasi-experimental design should bear fruit. However, two issues complicate the use of this methodological perspective. In first place, and as mentioned before, the data obtained do not reflect the dimensions found by Hofstede et al. (1990) in their study. The low reliability scores prevented us from using in an irrestrictive way their model.

On the other hand, the search for a new factorial solution that somehow corresponded to the formulated hypothesis failed (see Notes 6-2 and 7-2). As a consequence, the integration of the results hitherto obtained will mostly be performed reverting to the scores on the individual items. More specifically, the analysis will be based on the percentages of respondents that scored near to the respective poles and their shifts on the scale. Given the aforementioned low reliability scores, it would be erroneous to employ the triads of items found by Hofstede et al. (1990: 302). Therefore, the items employed in the analysis of each particular hypothesis were selected if their wording reflected unambiguously the essence of the issue under scrutiny. In a second step those other items that show a significant (or highly significant) correlation with one (or more) of the previously selected questions were also included.

The second difficulty confronted resides in the fact that though FeMeSA's high dispersion levels can plausibly be taken to reflect the true nature of the company's culture (i.e., its fragmentation), they also reduce accordingly the significance of the respective mean values. Because of this reduced certainty, it is unavoidable to trace back FeMeSA's roots and include Ferrocarriles in the analysis. In any case, the analysis had to be extended into the past: FeMeSA's new denomination and legal status notwithstanding, it cannot be understood as an independent cultural entity. Unfortunately, no systematic cultural research has been conducted at Ferrocarriles, let alone a quantitative measurement. This absence makes it difficult to posit about the company's main traits with a reasonable degree of certainty.

Two studies, however, have at least marginally approached the problem (Tesoro, 1996; Silverleaf, 1994). And, in addition, much material is present that allows to infer about Ferrocarriles' former cultural identity. On the basis of this material it can be concluded that depending on the particular line and point in time, three cultural layers seem to have coexisted: the aforementioned line identity, a bureaucratic culture, and a hard-ware oriented, engineering tradition. In the following sections the cultural reality of the private operators will be contrasted not only against FeMeSA but also, and particularly whenever the reduced significance generates doubts, against this background.

9.2 Hypothesis 1

The privatisation of a SOE will induce a shift from a concern with means towards a concern with ends

This dichotomic pair is well known in organisational theory. In the case under analysis it implied a shift from a purely normative approach towards a results-oriented management system. And indeed, there is considerable evidence suggesting the occurrence of such a transformation at both NCA and TBA. This evidence can be divided into two main bundles: those factors reducing the relevance of means and those others leading to an increasing importance of results.

The importance attached to this process by the incoming management teams cannot be overestimated. As mentioned before, their views on SOE's and about Ferrocarriles in particular was dyed by common prejudices about the public sector in general. Great care was thus invested in the elimination of procedural hindrances to efficient behaviour and the implementation of results oriented systems.

Concerning the reduction of bureaucratic procedures it is noteworthy that, once the units left the public sector, a large number of mandatory administrative procedures no longer had to be performed. Examples of such burdensome legal requirements were mentioned in chapter five and originated in the fact that as a public transport agency, Ferrocarriles was nested within multiple jurisdictions. Moreover, the private operators were free to design their own administrative and decisional systems. A first step in this direction was the substitution of the "legajo" (literally a "bundle" or "faggot", an obsolete administrative information system) by more modern, EDP-supported decision and control systems. On the other hand, the structural reduction of hierarchical levels and decentralisation shortened, reduced or eliminated many of the even previously redundant administrative circuits and flows.

Even more important than the reduction of the relative importance of means was the increased awareness of the accomplishments of meaningful ends. Of relevance in this respect was the introduction of a wide array of activity indicators and ratios. Most of them were already known at Ferrocarriles, but there the generated data was either left unprocessed or, more commonly, processed and archived.

At TBA, the most prominent among these indices were the regularity ratios (*índices de regularidad*), a series of three indicators about deleted or belated trains. The vitality of these indices resides in the fact that following the original contract, only if these indices exceed a certain level, price increases may be granted. On the other hand, if the number of deleted or belated trains was higher than what was agreed upon, the government through the National Railway Commission (later the National Commission of Transport Regulation, CNRT) could reduce the level of subsidy granted. Various other productivity indicators and parameters for purely internal issues were either developed or re-activated. In contrast to FeMeSA and Ferrocarriles, the information these indices delivered was constantly updated and employed for the routine as well as strategic decision making process.

The use of general statistics and performance indicators gained particular relevance during the initial phase of both companies. Beyond their more common use as managerial instruments, such indicators provided clear, easy to understand standards for employees. Immediately after the transfer to private management, expectations were far from clear; people had to reorient themselves, and indicators proved to be a valuable instrument in this respect. TBA's employees were confronted with new tasks, tools, and job requirements. At the same time,

they were granted by (mostly) unknown managers additional power and independence. This notwithstanding, some employees perceived even less degrees of freedom. They were afraid to act and generate negative responses in higher echelons. Management’s underlining of the content and use of indicators provided the necessary information about where to look for concrete requirements. In other words, by means of indicators employees get to know the “ground on which they are walking” (Pfiffner and Sherwood, 1961) and thereby reduce inaction (and anxiety levels). Moreover, the activity indicators proved to be an inexpensive and powerful instrument to demonstrate that a new era had started and to buy employees into this new project. TBA (as well as NCA) scores were frequently compared with the corresponding FeMeSA (or Ferrocarriles) figures; the dramatic increases were frequently cited as evidence of a cleavage and generated a sense of pride in all employees, but particularly among former public employees. The introduction of customer satisfaction measurements not only allowed to detect weak spots in the company’s strategy, but indicated clearly to all involved the ultimate aims of management. In their interviews, all former public employees agreed on the value of this indicator; they pointed out their usefulness as a mirror of “the otherwise rather fuzzy concept of customer satisfaction”. And, one might add, it fitted well their “engineering” tradition, more inclined to accept “hard” figures than concepts. To a large extent, the statistical data confirms the evidence collected through other means (see Table 9-1). When compared with FeMeSA, employees at TBA perceive that in their current working environment, greater efforts are being done and that there is far less routine.

Table 9-1
Percentage of respondents scoring 1 or 2 in questions 8 and 18

| | Percentage of respondents scoring 1 or 2 | | | | | | |
|--------------------------------|--|--------------------|-------------------------------------|------------------------|-------|-------------------------------------|----------------------------------|
| | FeMeSA | TBA | | | NCA | | |
| | Total | Total ¹ | Significant difference ² | former FA ³ | Total | Significant difference ⁴ | former FA ³ |
| people make least effort | 19 | 9 | | 5 | 2 | | 12 |
| each day brings new challenges | 38 | 60 | ** | 58 | 53 | | 54 |
| | | | | | | | people put in maximal effort |
| | | | | | | | each day is pretty much the same |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample; ³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

We might conclude that in general terms, the indices provided useful standards that allowed to re-direct efforts in a consistent and meaningful manner. But, even more important and beyond the more immediate uses of these indicators, their combined messages established the importance of results in the mind of the employees, thus confirming this first hypothesis.

9.3 Hypothesis 2

The privatisation of a SOE will induce a change in the source from where the employees derive their identity: from being centred on the organisation towards being centred on the particular job.

Three clusters of evidence support the change in the source of the employees' identity. Following a chronological order, those factors were linked to Ferrocarriles' dissolution, to the hindrances to the development of a new parochial identity, and finally to those factors that fostered the development of professional identities.

The first cluster bundles those factors that generated a strong organisational identity at Ferrocarriles and are, as a consequence of its dissolution, no longer present. Among other reasons, the national railways revealed a parochial culture because its employees viewed as their own some of the company's formal strategic aims. Examples of such –often cited– aims were the geographical and political unity of the country, the development of remote regional economies, or Ferrocarriles' function as a "School of the Nation", providing apprenticeships for the less educated. To some extent, the identification with the company was also fostered by a sense of pride in Ferrocarriles, its large workshops and network and, last but not least, a sense of belonging to the "big railway family".

However, the strategic aims were never reached; during deregulation, all facilities were either sold, handed over or scrapped; the railway family ceased to exist. In summary, the first reasons suggesting a change in the source of identity is the disappearance of the source itself and the impossibility to transfer the emotions associated with it.

On the other hand, a number of issues will probably hinder the development of a similar parochial attitude in the near future. In the first place, and in sharp contrast to Ferrocarriles' high degree of vertical integration, all private operators and TBA in particular are outsourcing a wide scope of their activities. As a consequence, there is frequent interaction between TBA agents and members of other organizations. Roughly a third of the people working for TBA on its premises belong to other companies, as e.g., those affected to cleansing duties (+300), security (+500), or locs and wagons maintenance (+250).

Moreover, the development of strong links with the organisation is also hindered by the absence of a long-term perspective. In contrast to the de-facto tenure offered at Ferrocarriles, private operators have not committed themselves to a no-lay-off policy. As a matter of fact, both companies continued to reduce their work force long after starting operations.

While these two clusters complicate the resurgence of an organisational identity, a number of factors foster a professional identification. In the first place, a considerable number of professions know –perhaps for the first time– a real labour market. During the public era, Ferrocarriles acted as a virtual monopsony for many of the special tasks it harboured (e.g., engineers, switch operators, locs maintenance). Although restricted in size because of the general economic conditions and technical incompatibilities, this market is at present growing

and used frequently as a reference for salary related decisions. TBA’s employees also keep an eye on this new market. These days, agents that occupy a redundant position or that do not perform according to expectations will not be transferred internally (as was the case in Ferrocarriles) but find themselves in those labour markets. Hence, the interest is shifted away from the organisation and towards (mostly) one’s own profession.

A further basis for the development of a professional identification was the fact that the selection criteria were mainly based on the professional expertise and specific knowledge. This is particularly relevant for former public agents, mostly hired by the former SOE on the basis of particularistic criteria.

The collected quantitative evidence is not conclusive with regard to the postulated shifts in perception. The percentage of individuals believing that job competence is the only selection criteria almost doubled, reaching 58 % (see Table 9-2). Among the former public agents this perception is particularly clear: less than 5 % believe that in hiring, the company takes particularistic criteria into account (see Addendum 9-1). Question 9 (asking about the extent in which the company covers the behaviour at work as well as at home) in both companies runs counter to the hypothesised shift: far more employees now believe that the company’s norms influence their behaviour both at work and home (FeMeSA = 64%; TBA = 40 %; NCA = 16 %).

Table 9-2
Percentage of respondents scoring 1 or 2 in questions 9 and 16

| | Percentage of respondents scoring 1 or 2 | | | | | | | |
|--------------------------------------|--|--------------------|-------------------------------------|------------------------|-------|-------------------------------------|------------------------|----------------------------------|
| | FeMeSA | TBA | | | NCA | | | |
| | Total | Total ¹ | Significant difference ² | former FA ³ | Total | Significant difference ⁴ | former FA ³ | |
| private life own business | 64 | 40 | ** | 47 | 16 | * | 15 | company covers behaviour at home |
| job competence only hiring criterion | 35 | 58 | ** | 71 | 56 | | 53 | particularistic criteria |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample; ³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

A probable explanation for this apparent contradiction might be found in the slow but pervasive process of dissociation that public employees underwent during Ferrocarriles agony and the demanding conditions of the new environments. At Ferrocarriles agents had to work an average of five hours, and were to some extent allowed to accommodate their work schedules. The company provided a small income, which in most of the cases had to be supplemented by a second job. Thus, Ferrocarriles relative influence on the agent’s everyday

life was minimal. This state of affairs changed radically once working for the private operators: they had to work for at least eight hours, were not allowed to moonlight and severely sanctioned if they did not show up for work. As a consequence, the position occupied at TBA or NCA regained the centrality it lost at the SOE. It seems plausible that this regained centrality induced many former agents to believe that the company's norms also influence their behaviour at home. This line of thinking is further underpinned by the fact that at NCA only 16 % believe that the private life is unrelated to the company and that such low scores are mainly present among former agents at TBA.

Finally, the resurgence of occupational identities can also be detected observing the degree in which the members of the different professions diverge. In this respect it is interesting to note some dissimilarities that emerge after applying the same criterion (in this case "occupation") at FeMeSA and TBA. The groups formed ex-post differed significantly on two thirds of the items, at FeMeSA on half the questions. This implies that some professions gained a clearer, distinguishable profile.

The selected items draw an ambiguous picture. However, if with regard to the influence the organisation exerts on the employees' private life the particular circumstances at FeMeSA are taken into account, it is possible to conclude that a shift in the perceptions in the hypothesised direction might be taking place. The analysis of variance further substantiates this finding. It shows that the previous, organisation –centred views gave place to professional identities. This notwithstanding, the collected evidence is not conclusive and does not confirm beyond doubt the postulated hypothesis.

9.4 Hypothesis 3

The privatisation of a SOE will induce a shift from a concern for people towards a concern for completing the job.

The rationale backing this hypothesis is clear and unambiguous: the so-called "social conquests" gained over many years of sometimes intense union struggle formed a work environment that provided large benefits for Ferrocarriles' employees. It was well known that most of these benefits would disappear once private management started operating the companies. And, as described earlier, the remaining former public agents were stripped from most of their prerogatives.

Working time started to be checked and absenteeism harshly punished. Performance was measured and people were held accountable against previously defined targets. At Ferrocarriles, stories about engineers leaving a cargo train somewhere between stations because their working time was over abounded. Such stories now belong to the past. Engineers are obliged to reach the terminal, even if it implies working overtime. Similar norms apply to other jobs as well. The importance of completing one's task is frequently being underlined by managers and supervisors alike.

As shown in Table 9-3, this contrast is not reflected statistically. In both private companies the number of employees that believe that in their working environment strong pressure is exerted to finish the tasks and that little concern is given to personal problems is above 60 %. This percentage is only slightly above the corresponding FeMeSA figure (58 %), implying that no radical departure from previous practices took place. If the validity of the information about the practices prevalent at Ferrocarriles (see, e.g., Silberleaf, 1994; Knechtel, 1993) is assumed, the score similarity can only be attributed to the demanding conditions at FeMeSA. As mentioned in chapter five, staff reduction forced agents to frequently work overtime while income levels remained unaltered.

Table 9-3
Percentage of respondents scoring 1 or 2 in questions 2 and 10

| | Percentage of respondents scoring 1 or 2 | | | | | | | |
|---|--|--------------------|-------------------------------------|------------------------|-------|-------------------------------------|------------------------|--------------------------------------|
| | FeMeSA | TBA | | | NCA | | | |
| | Total | Total ¹ | Significant difference ² | former FA ³ | Total | Significant difference ⁴ | former FA ³ | |
| pressure exerted to finish task | 58 | 61 | | 67 | 68 | | 67 | personal problems taken into account |
| organisation takes responsibility welfare | 14 | 36 | ** | 51 | 38 | | 43 | organisation only interested in work |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample; ³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

From the comparison of the ratings about the degree of responsibility for the employee's welfare, an interesting phenomenon emerges. While only 14 % of the respondents at FeMeSA endorsed that the SOE was taking direct responsibility for their welfare, this figure surpassed 35 % at both TBA and NCA. Furthermore, this perception was even stronger among former Ferrocarriles agents (51 and 43 % at TBA respectively NCA).

On the other side, 80 % of the agents agreed that FeMeSA was solely interested in their work (see Addendum at the end of this chapter). This is not surprising, since the company barely offered what was required by law. After the transfer this perception is far less common at TBA (33 %) and NCA (22%) in general, and among former public agents in particular (20 resp. 16 %). Here again, what seems to play a decisive role is the collective experience at FeMeSA.

The flexibility regarding individual needs and requirements, common at Ferrocarriles, disappeared at FeMeSA. Of course, neither was the possibility to e.g., adjust its own work schedule, or not to show up for a few days (both important features for moonlighters) available at the private units. But, and in sharp contrast to the ex-ante situation, a number of

new practices were implemented. As a result of these policies, particularly former public agents started to believe that management had a genuine interest in their advancement and concerns.

Of paramount importance in this respect were the large sums invested in task-specific educational activities. In less than a year, every agent at TBA has at least visited one of the many courses offered; in total, more than 120.000 man-hours of instruction have been completed. At NCA, some managers and supervisors have visited and been trained at the facilities of their American technical partners in the United States. The fact that even middle level supervisors have been sent abroad is a landmark that has been cited over and over again. To gauge the attached importance, one has to be aware that the cost of such a trip exceeds three or four times their monthly income. Also frequently mentioned in our interviews is the fact that for the first time now managers “walk the firm” (*caminan la empresa*), a local version of the MBWA practice. In highly positive terms many of the interviewees indicated that during this trips, “those higher-up” (*los de arriba*) have shown real interest in the difficulties and concerns of those working at the front line.

In summary, the statistics obtained refute the third hypothesis. No significant shift towards a stronger task orientation has been detected. On the contrary, the new policies followed (e.g., MBWA, education) are widely perceived as a clear demonstration that management cares about human resources. Thus, while the task orientation remains basically the same, there is a trend that even runs counter to the postulated direction.

Moreover, the lack of correlation between both items indicates that the perceived strong efforts to finish the tasks are seen as being reconcilable with an earnest concern for the employee. In summary, and in accordance with Hofstede et al. remarks about the lack of general applicability of their model (1990: 313), for this sample a strong task orientation does not seem to be incompatible with an equally strong employee orientation.

9.5 Hypothesis 4

The privatisation of a SOE will induce a shift in the orientation towards clients: from “user” to “customer”.

In the old days, leaving aside a few ill-conceived and ill-fated attempts to prioritise the customers, in general precedence was given to engineering or normative considerations. The customer –in Ferrocarriles’ terms a “user” – and his or her needs were often left out of the analysis. As mentioned during the interviews, the prevalent idea at Ferrocarriles and FeMeSA was “to run trains” (*correr trenes*).

Those who took over were extremely aware of this state of affairs, as it had been a central argument of those who for years tried to deregulate this as well as other markets. Consequently, in both private companies employees were confronted with a “customer first” message at the very beginning of the selection procedure; in addition, rhetoric was backed-up with concrete deeds. In subsequent training programs implemented at TBA, the concept was

analysed in detail: concrete situations and model responses were provided and exercised. Ticket expenditure time was significantly reduced, delays and cancellations reached unprecedented low levels, and customer service centres installed. In the same vein, the cargo company moved its HQ to the centre of its market and fully decentralised its commercial activities: train guards and engineers were allowed to accept load directly at the stations.

As evidenced by the statistical analysis, the perceptions shifted accordingly (see Table 9-4): instead of less than a third, now over half the sample (at both NCA and TBA) believes that major emphasis is set on meeting customer needs (item 1). Accordingly, significantly fewer agents perceive that strong pressure is exerted to observe norms and procedures (FeMeSA 52 %, TBA 17 %, NCA 14 %). This shift clearly reflects the reorientation encouraged by both management teams.

A highly significant correlation has been detected between the first and last item of the questionnaire: those who perceive that major emphasis is exerted in meeting customer needs also believe that each day brings with it new challenges. This perception, expressed by less than 40 % of the respondents at FeMeSA, is now being shared by more than 60 % at TBA.

Table 9-4
Percentage of respondents scoring 1 or 2 in questions 1, 15 and 17

| | Percentage of respondents scoring 1 or 2 | | | | | | | |
|--|--|--------------------|-------------------------------------|------------------------|-------|-------------------------------------|------------------------|--|
| | FeMeSA | TBA | | | NCA | | | |
| | Total | Total ¹ | Significant difference ² | former FA ³ | Total | Significant difference ⁴ | former FA ³ | |
| emphasis meeting customer needs | 32 | 52 | ** | 52 | 54 | | 47 | emphasis correct following procedures |
| procedures more important than results | 33 | 31 | | 49 | 39 | ** | 44 | results more important than procedures |
| strict ethic and honesty standards | 43 | 53 | * | 66 | 51 | | 53 | pragmatic with regard to ethic and honesty |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample; ³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

The changes in the customer focus notwithstanding, the agents' perception about the importance of the legality of their actions is not changing at a comparable pace. Broadly speaking, a third of the respondents in all three units believe that procedures are more important than results (FeMeSA 33 %, TBA 31 %, NCA 39 %). This perception seems to be particularly entrenched among former Ferrocarriles agents (TBA 49 %, NCA 44 %). Concerning the other pole of the pair (see Addendum), it is worth of mention that while half

the sample at FeMeSA expressed priority to results over procedures, at TBA and NCA only 41 % resp. 21 % shared this perception. Particularly former public agents rated the importance of results (as opposed to procedures) very low (TBA 23 %, NCA 16 %).

A similar situation is revealed in matters of business ethics and honesty. The number of agents that believes that in their working environment ethical standards are followed strictly increases ex-post (FeMeSA 43 %, TBA 53%, NCA 51 %). On the other side, the number of individuals that perceive daily practices as pragmatic sharply decreases (FeMeSA 37 %, TBA 18 %, NCA 20 %).

In other words, the statistical evidence suggests two trends: one indicating that higher priority is given to the customer, and a second trend revealing an increase in the importance granted to procedures and dogmatic attitudes. In general, these trends are considered to be incompatible: a legalistic orientation runs counter to the “customer first” notion.

The observed contradiction may eventually be resolved restoring to previous practices or developing a less normative attitude. For the time being it seems clear that while the customer orientation has reached most of the minds, the legalistic approach is still present –and to some extent gaining strength. The roots of the first trend can be found in the constant “preaching of the customer gospel” and the customer oriented systems and facilities implemented. Far less efforts were conducted to eradicate legalistic practices. No steps were undertaken showing how to deal in a flexible way with those norms that remained in place or have been introduced after the transfer.

The consequences of this deficiency are particularly earnest because, as seen before, a sizeable number of employees still perceive that the correct following of procedures is of major importance. Many of them were afraid not to fully comply with the rules. According to our interviewees, agents were not fully convinced about management’s intentions. Whether management “really meant it” or not was still doubted. Since the risks involved in transgressing the procedures were uncertain, agents were inclined to follow them. This the more so, since both companies fired some employees during their initial phase and job opportunities at that time were extremely rare. Moreover, the stories narrated or published in the in-house organ frequently glorified courageous acts of specific individuals. These agents acted pro-actively or far beyond what is required by the norms, but never trespass them. After more than 10 resp. 40 months of existence, management did not demonstrate that they would approve the behaviour of someone who, trying to reach an official goal, deviated from what was prescribed.

In summary: management succeeded in generating an awareness about the customer. As revealed by our interviews, wide agreement existed about the need to respond to their expectations. New, customer-friendly practices are continuously being learnt and implemented. In that respect, the postulated hypothesis can be confirmed. Nevertheless, much still has to be done to overcome the prevalent legalistic orientation.

9.6 Hypothesis 5

The privatisation of a SOE will induce a change in the amount of internal structuring: from loose control towards tight control.

There is plenty of evidence confirming the trend towards tighter control at TBA. Both relevant items show a significant shift towards tighter control. While roughly half the respondents believed that people at FeMeSA were cost-conscious, almost 80 % endorsed this statement after deregulation. Similarly, a quarter more agents believed at TBA that meetings were starting on time. On the other hand, while roughly 35 % of the respondents at FeMeSA believed that in their company “no one thinks of costs”, ex-post this figure decreased to around 5 percent (see Addendum 9-1).

Table 9-5
Percentage of respondents scoring 1 or 2 in questions 7, 11 and 13

| | Percentage of respondents scoring 1 or 2 | | | | | | | |
|---|--|--------------------|-------------------------------------|------------------------|-------|-------------------------------------|------------------------|---|
| | FeMeSA | TBA | | | NCA | | | |
| | Total | Total ¹ | Significant difference ² | former FA ³ | Total | Significant difference ⁴ | former FA ³ | |
| everyone aware costs of material and time | 54 | 78 | ** | 88 | 76 | | 75 | no one thinks of costs of time or materials |
| we make many jokes about the company | 19 | 15 | | 8 | 20 | | 21 | we always speak seriously |
| meeting times are kept punctually | 19 | 44 | ** | 56 | 10 | ** | 41 | meeting times only kept approximately |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample; ³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

It is worth mention that only in the case of this hypothesis the three items that build the P5 dimension in Hofstede et al.'s study (1990) do also show (highly) significant correlations in the sample here under study. Also of interest is the fact that item 9 (private life own business / organisation covers behaviour at home) is highly correlated with the perception about timeliness (item 13).

The quantitative data was widely supported by all of our interviewees at TBA and NCA. There was absolute consensus with regard to the increase in work intensity at all levels. Employees in directly productive areas for example refer to the fact that tools and spare parts

are readily available, whereas their absence was a frequent reason for idle times at Ferrocarriles. On the other hand, and based on the introduced regime of labour flexibility, they can easily be reassigned tasks wherever additional resources are needed. Moreover, attendance is strictly controlled and absenteeism severely punished.

A noteworthy modification with respect to the possibility to exercise control were the modifications introduced in the architectural design of the main administrative offices. Soon after taking over, TBA's management re-united previously dispersed administrative units in several large office rooms at headquarters, a 2-storey high, classic building built by the English administrators around 1910. During the public period these main office rooms of about 25 by 10 meters had been subdivided into tiny compartments. The size and type of wall of these cubicles varied, strictly following implicit hierarchical rules. Thus for example, while the head of the office was allowed to have brick or hardboard walls, lower level employees delimited their personal fiefdom with simple shelves which were subsequently filled with folders or wallpapered with posters. As a result, most employees in such areas had their "own" "office", hardly accessible for outsiders and difficult to control by supervisors. The architectural disarray of these constructions clearly reflected the locally prevalent power relations, the often mentioned lack of transparency and, in a last analysis, the bureaucratic reality of Ferrocarriles. It almost goes without saying that one of the first decisions taken by the new operators was to tear down all these partitions, regaining space and the possibility to supervise. Leaving aside higher management, supervisors and subordinates now share the same room. Plain desks have been arranged in geometric patterns that allow for close control.

Similar arrangements were also implemented at NCA's new office buildings in Villa Diego near Rosario. There however, hierarchical differences were stronger underlined by space divisions. At TBA middle managers shared offices with their immediate subordinates; at NCA they occupied an office of their own. NCA's upper management remained rather isolated, working concentrated in a rather difficult to access, separate wing of the building. There were many other, more explicit and direct messages suggesting tighter control. Argentinean SOE's and Ferrocarriles in particular were perceived as approaching work lackadaisically. Consequently, the new operators were very outspoken about a radical change in this respect. Management flanked their words with concrete systems: time-clocks were re-installed, financial and production standards re-introduced, employees started to be held accountable against previously defined targets. Results were measured and feedback provided as soon as available. In order to validate this fifth hypothesis it is necessary to acknowledge the dissimilar trends that with regard to the issue of control show both units. In this respect it is possible to observe that shifts in the predicted direction take place at TBA, but not as strong at the cargo unit. We might conclude that while the statistical results widely confirm the hypothesis here under scrutiny for the suburban passenger line, they are not conclusive with respect to NCA.

9.7 Hypothesis 6

The privatisation of a SOE will induce a change in the consistency of the culture: from homogeneity towards heterogeneity.

The literature provided a reasonable overview of Ferrocarriles' culture. The former SOE has summarily been described as highly routinised, a paradigmatic public bureaucracy. Long entrenched practices were prevalent, local customs were passed from one generation to the next (often in a nearly biological sense of the term). The archival evidence collected strongly suggested that at FA and hence at FeMeSA one could find a rather consistent and homogeneous set of cultural practices.

As a consequence of the substitution of the old power holders by new managers and the concurrent modification of the main external variables (market position, legal frame and funding), a noticeable transformation of the cultural reality was expected. New practices would be introduced, the relative importance of older ones shifted, some might even disappear. In other words, it was expected that the overall degree of cultural diversity would increase.

According to the quantitative analysis, the situation at FeMeSA runs counter to expectations: far from being homogeneous, the culture was fragmented to a point where it is difficult to speak of "culture" anymore, at least if defined as "common programming" or "shared perceptions".

On the other hand, almost a year after the transfer, at TBA the overall cultural picture was rather homogeneous: the average dispersion was significantly reduced. The NCA, after 40 months of private operation (thus four times longer than TBA at the time of the survey) reached even higher degrees of cohesion. In both *ex post* cases the overall dispersion reaches a degree present in the most heterogeneous groups of the samples surveyed by Hofstede et al. (1990). They nevertheless allow to conclude that homogeneity has increased, at least to a level where it is plausible to talk about "shared" perceptions.

In summary, the statistical analysis clearly disconfirms hypothesis 6. Even more: the obtained dispersion scores indicate that far from leading to cultural heterogeneity, (new) management's main arguments have been successfully transmitted and practices are starting to cluster around them.

The validation process forwarded that members in both units, *vis-à-vis* FeMeSA, perceive a stronger results orientation, a greater professional awareness, and that management's interest shifted away from a purely job-related interest. In addition, though a legalistic approach is still observable, the importance of the customer has gained relevance. Finally, it has been demonstrated that in general, the degree of cohesiveness has increased, allowing to talk now about a "common programming".

Less marked are the differences among both private operators. Nonetheless, they reveal some interesting peculiarities. In the first place, NCA shows less overall diversity in the responses, probably as a consequence of its longer common experience. More important seems to be the fact that almost without exception, in those questions where there is a significant difference between NCA and TBA, the scores of the cargo line always fall on the "bureaucratic" pole of the item.

With this information in mind it is interesting to contrast the former public agents working at TBA and NCA. Both groups are approximately of equal size. But while at NCA they formed a vast majority, at TBA they constituted a third of the staff. As indicated in the respective chapters, both subsamples can be distinguished on a statistically significant level on more than half the items from their colleagues with other professional experiences.

Those former public agents working for the suburban line have widely adopted the main views proposed by management. As a matter of fact, the statistical evidence suggests that they hold, particularly for the so-called critical items, even more radical positions than their colleagues with a private sector background. Those former agents now working for NCA responded in a more consistent manner, but tended to adhere with less strength to the same items.

As can be observed in the Addendum at the end of this chapter, both subsamples diverge on a statistically significant level on roughly half the items. Almost without exception they score on the same half of the continuum, indicating that the differences are more a question of shades than of matter. Among other issues, TBA's former public agents perceive their working environment as less risk averse, as having a longer planning horizon and as less secretive, more open to outsiders. NCA's former public agents perceive their working environment as less punctual (59 % vs. 17 % at TBA) and less hospitable to new colleagues (27 % vs. 53 % at TBA).

The scores thus indicate that though more consistent in their responses, the former agents at NCA have not changed their perceptions to the same extent as the former agents now working at TBA. And, given the absolute position of the mean value, it is possible to recognise some remnants of previous public practices.

It is of course noteworthy that although it is four times as old, far more public practices are lingering on at NCA than at the suburban line. About the reasons for this lag only educated speculations can be formulated. A first reason might lie in the dissimilar experiences NCA and TBA went through during the period of deregulation. As mentioned before, NCA was transferred only a few months after the announcement of Ferrocarriles' privatisation plans. During that period some agents were (early-) retired; but the bulk of the reductions were accomplished by the new operators. Thus, the working groups remained basically unaltered until NCA's start. The suburban Mitre line on the other hand was the last to shift from public to private hands. More than four years span from early 1991 (when plans to privatise Ferrocarriles were announced) to actual transfer (end of May 1995). Over the whole period FeMeSA staff was firmly reduced (from 13000 to less than 2100). Groups were constantly formed and disbanded, partly to cover voids or requirements, to some extent to incorporate colleagues from other (suburban) lines already transferred. This constant reshuffling of groups explains the lack of common cultural programming at the time of our measurement at FeMeSA (June 1994). Those hired by NCA did not witness such degrees of cultural commotion. It thus can plausibly be expected that more cultural elements have been transferred basically unmodified.

A second source of NCA's lag might lie in the disparate staffing policies followed by both private operators. As has been mentioned, NCA hired almost exclusively former public

agents. TBA on the contrary only did so in those cases where it was necessary because of the absence of an external market (e.g., engineers, switch operators). Partly as a consequence of the aforementioned first source, working groups at NCA had a common history; groups at TBA on the contrary not only lack this common history but in most cases include colleagues with a non-Ferrocarriles background. The implications are clear: at NCA the likelihood of the introduction of alien cultural elements was far lower than at TBA.

There are two elements that could further foster this lag. Firstly, the selection procedures were much tighter at TBA than at NCA. This might bear on the perceptions about the formation of a professional meritocracy in the case of TBA. Secondly, the interactions among higher level officers and low-level employees are far less frequent at the cargo than at the suburban line. This fact certainly slowed down the pace of the cultural transformation.

9.8 Concluding remarks

It should be noted that neither at TBA nor at NCA an explicit cultural program was implemented. However, management in both companies was aware of the concept and its implications. It was clear to them that by installing certain systems or norms, specific “messages” were being sent out to the employees. Nevertheless, such messages were never explicitly intended or reinforced in a systematic or planned manner. And, once discovered as an even useful by-product, they were not highlighted or exploited. In other words, management was acting “blindly” in cultural terms.

With specific regard to the more visible cultural elements, little was done to remove previous components. To some extent, this can be ascribed to their lack of awareness of the significance attached by former public employees to specific elements. But, as mentioned before, the cultural negligence at Ferrocarriles and later at FeMeSA did not engender many such symbols. On the other hand, the process of group reshuffling and division either deleted them or left them void of any significance.

Once operating, two elements of identification were introduced in both companies: new “institutional” colours on locs and wagons and a new logo. Deeper consequences had the introduction of what in both companies was termed (heavily borrowing from the then ongoing political debate) as “new discourse”. With variations in emphasis and shades, at TBA and NCA this new discourse included the following four key elements: meritocracy, efficiency, control and customer orientation. The reason for the selection of these four issues was rooted in the perception management (and the public opinion in general) had on where the main weaknesses and (simultaneously) differential traits between public and private sector were to be found. Accordingly, the content of each of these terms was handled rather loosely.

Broadly speaking, they were defined as the antonym of what were considered to be the until then prevalent practices. Thus for example, “meritocracy” was simply defined as lack of nepotism, “amiguismo”, clannishness or related behaviours. Moreover, such meritocratic means were only employed for the hiring decision. By the time of our survey, HR officials at TBA “started thinking about the introduction of some sort” of systematic appraisal and advancement procedures. At NCA, visited forty months after the start of operations, no plans at all were made in that respect.

However vaguely defined, these four issues were frequently mentioned at gatherings and courses as key elements of the new organisational reality. Conspicuously missing from that list is the issue of the "bottom line" or any overt reference to the obviously pre-eminent profit orientation of the companies. When asked about this absence, responses were ambiguous, but strongly suggested two reasons. In first place, to mention profit as an ultimate goal was strongly rejected during public times and would probably run counter to Ferrocarriles' tradition. Railway activity always pursued "higher ends", as e.g., the country's geopolitical integration, to serve the community or to help less advantaged groups. For decades, the notion of profitability was excluded from organisational discourse and practice, by politicians as well as unionists, those groups that provided Ferrocarriles' power holders. Any profit obtained was gained through the exploitation of the public or the employees, so the saying went, and thus had to be avoided. On the other hand, to mention a profit orientation as the most important goal runs counter to a wider cultural value present in Argentine society (and other Latin American nations as well).

As a result of the validation process it seems clear that in both privately operated carriers a results and a customer orientation are firmly embedded and that their employees (though with less strength at NCA) developed habits that correspond to a new awareness about the costs of time and materials. Contrary to the statistical proof, the evidence collected through other means clearly indicates that a shift towards a more professional identity is taking place. Finally, the process refuted the alleged shift away from a concern for people and towards a concern exclusively centered around the job (and its underlying dichotomy). According to the answers at both companies, the perceived job orientation does not seem to be at odds with a high degree of responsibility for the employees welfare on management's part. Broadly speaking, the integration of the three cases forwarded clear evidence pointing towards what could be considered a cultural turnaround. Though some bureaucratic residues are still present, as well as remnants of past professional identities and practices, the overall transformation towards efficiency and market is clearly visible. In the following (and last) chapter the instruments and factors that made such a cultural transformation possible will briefly be reviewed.

Addendum 9-1

Aggregated respondent scores

| | | Percentage of respondents scoring 1 or 2 | | | | | | | |
|------|---|--|--------------------|-------------|------------------------|-------|-------------|-----------|--|
| | | FeMeSA | TBA | | | | NCA | | |
| Item | | Total | Total ¹ | Significant | former FA ³ | Total | Significant | former FA | |
| 1 | major emphasis is exerted in meeting customer needs | 32 | 52 | ** | 52 | 54 | | 47 | major emphasis is exerted on correctly following organisational procedures |
| 2 | strong pressure is exerted to finish tasks; personal problems of colleagues are of secondary importance | 58 | 61 | | 67 | 68 | | 67 | personal problems are taken into account; the tasks is of secondary importance |
| 3 | people feel uncomfortable in unfamiliar situations; they try to avoid to take risks | 58 | 46 | * | 44 | 64 | ** | 69 | people feel comfortable in unfamiliar situations; they have no difficulties in accepting risks |
| 4 | all important decisions are made by individuals | 55 | 50 | | 34 | 38 | * | 31 | all important decisions are made by groups or committees |
| 5 | we do not think more than a day ahead | 51 | 37 | * | 28 | 51 | ** | 55 | we think 3 or more years ahead |
| 6 | both the organisation and its people are open and clear to newcomers and outsiders | 48 | 63 | * | 77 | 54 | | 50 | both the organisation and its people are closed and secretive, even among insiders |
| 7 | everyone is strongly aware of the costs of time or materials | 54 | 78 | ** | 88 | 76 | | 75 | no one thinks of costs of time or materials |
| 8 | people only make the least effort | 19 | 9 | | 5 | 2 | | 12 | people put in maximal effort |
| 9 | a persons private life is regarded as his own business | 64 | 40 | ** | 47 | 16 | * | 43 | the organisation's norms co-ver the employee's behaviour at work as well as at home |
| 10 | the organisation takes direct responsibility for the employee and his family's welfare | 14 | 36 | ** | 51 | 38 | | 43 | the organisation is only interested in the work employees do |
| 11 | we make many jokes about the company and our jobs | 19 | 15 | | 8 | 20 | | 21 | we always speak seriously about the company and our jobs |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample;

³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

Addendum 9-1 (cont.)

Aggregated respondent scores

| | | Percentage of respondents scoring 1 or 2 | | | | | | | |
|------|---|--|--------------------|-------------|------------------------|-------|-------------|-----------|---|
| | | FeMeSA | TBA | | | | NCA | | |
| Item | | Total | Total ¹ | Significant | former FA ³ | Total | Significant | former FA | |
| | | | | | | | | | |
| 12 | anyone would fit the organisation | 35 | 24 | | 21 | 24 | | 21 | only very special people fit into the organisation |
| 13 | meeting times are kept punctually | 19 | 44 | ** | 56 | 10 | ** | 41 | meeting times are only kept approximately |
| 14 | new employees need more than a year to feel at home | 31 | 21 | | 19 | 38 | ** | 37 | new employees only need a few days to feel at home |
| 15 | organisational procedures are more important than results | 33 | 31 | | 49 | 39 | ** | 44 | results are more important than following correct procedures |
| 16 | job competence is the only criterion in hiring; the back-ground has no influence | 35 | 58 | ** | 71 | 57 | | 53 | people of a certain family, social class or education have bigger chances to be hired |
| 17 | in matters of business ethics and honesty, we obey strict standards, even if they run counter to short term results | 43 | 53 | * | 66 | 51 | | 53 | regarding ethics and honesty we are pragmatic, not dogmatic |
| 18 | each day brings new challenges | 38 | 60 | ** | 58 | 54 | | 54 | each day is pretty much the same |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample;

³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

Addendum 9-1 (cont.)

Aggregated respondent scores

| | | Percentage of respondents scoring 4 or 5 | | | | | | | |
|------|---|--|--------------------|-------------------------------------|------------------------|-------|-------------------------------------|-----------|--|
| | | FeMeSA | TBA | | | NCA | | | |
| Item | | Total | Total ¹ | Significant difference ² | former FA ³ | Total | Significant difference ⁴ | former FA | |
| 1 | major emphasis is exerted in meeting customer needs | 52 | 17 | ** | 18 | 14 | | 16 | major emphasis is exerted on correctly following organisational procedures |
| 2 | strong pressure is exerted to finish tasks; personal problems of colleagues are of secondary importance | 17 | 7 | | 4 | 1 | | 1 | personal problems are taken into account; the tasks is of secondary importance |
| 3 | people feel uncomfortable in unfamiliar situations; they try to avoid to take risks | 28 | 21 | * | 21 | 12 | ** | 11 | people feel comfortable in unfamiliar situations; they have no difficulties in accepting risks |
| 4 | all important decisions are made by individuals | 36 | 29 | | 40 | 36 | * | 41 | all important decisions are made by groups or committees |
| 5 | we do not think more than a day ahead | 26 | 41 | * | 54 | 28 | ** | 21 | we think 3 or more years ahead |
| 6 | both the organisation and its people are open and clear to newcomers and outsiders | 38 | 23 | * | 13 | 18 | | 19 | both the organisation and its people are closed and secretive, even among insiders |
| 7 | everyone is strongly aware of the costs of time or materials | 35 | 5 | ** | 2 | 6 | | 7 | no one thinks of costs of time or materials |
| 8 | people only make the least effort | 67 | 77 | | 87 | 87 | | 88 | people put in maximal effort |
| 9 | a persons private life is regarded as his own business | 19 | 33 | ** | 28 | 54 | * | 57 | the organisation's norms co-ver the employee's behaviour at work as well as at home |
| 10 | the organisation takes direct responsibility for the employee and his family's welfare | 80 | 33 | ** | 20 | 22 | | 16 | the organisation is only interested in the work employees do |
| 11 | we make many jokes about the company and our jobs | 50 | 54 | | 69 | 47 | | 41 | we always speak seriously about the company and our jobs |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample;

³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

Addendum 9-1 (cont.)

Aggregated respondent scores

| | | Percentage of respondents scoring 4 or 5 | | | | | | | |
|------|---|--|--------------------|-------------------------------------|------------------------|-------|-------------------------------------|-----------|---|
| | | FeMeSA | TBA | | | NCA | | | |
| Item | | Total | Total ¹ | Significant difference ² | former FA ³ | Total | Significant difference ⁴ | former FA | |
| 12 | anyone would fit the organisation | 45 | 36 | | 47 | 31 | | 32 | only very special people fit into the organisation |
| 13 | meeting times are kept punctually | 65 | 23 | ** | 17 | 59 | ** | 59 | meeting times are only kept approximately |
| 14 | new employees need more than a year to feel at home | 50 | 52 | | 53 | 31 | ** | 27 | new employees only need a few days to feel at home |
| 15 | organisational procedures are more important than results | 52 | 41 | | 23 | 21 | ** | 16 | results are more important than following correct procedures |
| 16 | job competence is the only criterion in hiring; the back-ground has no influence | 50 | 10 | ** | 4 | 5 | | 3 | people of a certain family, social class or education have bigger chances to be hired |
| 17 | in matters of business ethics and honesty, we obey strict standards, even if they run counter to short term results | 37 | 18 | * | 11 | 21 | | 17 | regarding ethics and honesty we are pragmatic, not dogmatic |
| 18 | each day brings new challenges | 45 | 18 | ** | 25 | 19 | | 20 | each day is pretty much the same |

¹ computed at the level of the total sample; ² indicates a significant difference with the FeMeSA sample;

³ only former FeMeSA employees; ⁴ indicates a significant difference with the TBA sample

10. Conclusion

10.1 Introduction

This final chapter will highlight the principal lessons that can be extracted in spite of the aforementioned shortcomings. Special attention is given here to those elements that enabled a relatively swift reorientation of the cultural practices. The chapter closes by pointing at a number of research questions that on the basis of the knowledge gained and current discussions in the field merit further investigation.

10.2 Relevant gains

There are three core issues for which relevant information has been gained. To start with, for the first time encompassing cultural diagnoses were formulated for all four companies involved in the study. Secondly, this information allowed to draw comparisons between the different units. Such lateral and longitudinal analysis provided the necessary input for the detection of any trends at company level resulting from the change in ownership. Finally, this same information allowed to compare sub-cultural formations and the construction of new identities among those agents employed in the newly created companies. The following lines summarise these findings, as they will provide the basis for the next section.

As mentioned before, this study provides comprehensive cultural portraits of the original state owned enterprise as well as of the companies that evolved from it. As mentioned before, at the time of Ferrocarriles' transformation into FeMeSA its culture was already severely weakened as a consequence of a decade long debilitation. This cultural decay was caused by the absence of leadership and common institutional perspectives, among other causes. This notwithstanding, it was possible to trace some sub-cultural formations (e.g., switch operators) and overarching themes (e.g., hardware orientation, engineering tradition, the glorification of the past). In the four years that elapsed between the creation and liquidation of FeMeSA, the culture was further debilitated. At the time of the transfer, and as a consequence of the massive retirements, the continuous reshuffling of groups, and the introduction of new members, an initially infirm and fragmented culture was completely destroyed.

Just ten months after starting operations, TBA's management succeeded in reaching a reasonable degree of overall cultural consistency, and was particularly successful in changing the common perceptions of those of its agents with a previous working experience at the state-owned railway lines. As a matter of fact, and particularly for those items termed (and issues deemed by management as) "critical", the former public agents scored nearer to the "competitive" end of the respective items' scale.

In terms of the consistency of its common practices, the response homogeneity at NCA did not differ significantly from the one surveyed at the passenger line, in spite of its longer existence. Contrary to the situation at TBA, at the cargo line it was possible to detect a line of cleavage between managerial and non – managerial levels. Non – managers scored far more parochial; other bureaucratic elements have also been found among them.

The culture of both private units can clearly be distinguished from the public organisation they stem from. The most radical departure from previous perceptions was detected among those concerning cost and time-consciousness, customer orientation and the use of meritocratic criteria. Despite these similarities, NCA's culture when compared to the one revealed at TBA seem to be less risk-friendly, timely, open and ends- and future oriented. This implies that probably as a consequence of its different staffing policies, the cargo line inherited far more practices from its public past, a bundle of unresolved issues it has some difficulties coping with.

Put together, the traits succinctly listed above allow to elaborate on broader issues concerning the construction and removal of common understandings among members of any given organisation. On the basis of the evidence collected, the following section will discuss the formation and destruction of cultural practices and analyse to what an extent a reduction in the degree of "publicness" has an influence upon these two processes.

10.3 What lessons can be learned?

Beyond the more specific knowledge gained from each of the units surveyed and the comparisons among them, there are three issues that derive from the previous discussions and need to be addressed. Contrary to common practice but following the order in which these issues emerged during the study, this section will look at how cultures can be (re) moulded and then (re) created. The section closes relating the "publicness" question to cultural shifts when changing from public to private ownership.

10.3.1 Cultural destruction as an instrument

Though insight has been gained into a number of culture-related issues, the evidence concerning the destruction of the previous organisational practices bears particular relevance. Though it may be argued that the process of debilitation started long before deregulation, it seems probable that the main shifts took place as a consequence of the continuous reshuffling, depletion and new formation of groups of disparate origin.

On the other hand, though TBA started operating under private management more than three years after NCA, at the time of the survey employees of both companies had similar cultural profiles. This fact raises the question of the (relative) speed with which each company adjusted to its new environment and allows two basic interpretations. A first assumption would be that a year after its transfer NCA had reached its current cultural profile, and that it remained basically unaltered since then. This implies that the bulk of the cultural adjustments took place in the first year, and that only marginal adjustments take place afterwards. Since no measurements were done during NCA's initial phase, this first assumption can not be left out of consideration.

There are however strong arguments to counter it. It seems unlikely that NCA transformed its culture in such a short time span because of many obstacles and hindrances. To start with, over 95 percent of NCA's staff has been transferred from FA directly (i.e., without closer scrutiny and selection), bringing with them century-old practices and entrenched habits. As mentioned in chapter 8, employees opposed the transfer and hindered the seizure of the

property by the new operators (McCaffrey, 1994: 65); in other words, employees were all but receptive to innovations. TBA invested heavily during its first year in further education and training; at NCA on the contrary, only few courses were offered. Finally, management at NCA was rather isolated and interacted far less with members of the lower echelons than their colleagues at TBA. In short, the likelihood that the cultural transformation of both companies took place following a similar pattern and at the same speed is extremely low.

The second assumption implies that employees at TBA reached a similar cultural profile in basically a fourth of the time needed by their colleagues at NCA. This relatively speaking higher speed could be related to the fact that as new employees of TBA, the former public agents formed a minority. Probable additional causes might be the stronger interaction of TBA's management with the organisational base and the strength and consistency of the formers' messages. Nevertheless, it seems highly likely that the higher speed of change was also a consequence of the inherent weakness of the previous cultural order.

This fact bears particular relevance because in the cases here under scrutiny, many of the practices prevalent until deregulation were not merely changed for any alternative common understanding but for the exact opposite (e.g., an emphasis on means for an orientation towards ends; a procedure for a customer orientation). Under circumstances in which the culture is not merely shifted towards a stronger orientation on one or more dimensions but has to perform a "U-turn" in its understandings, the destruction of the previous order accomplishes half the task. As evidenced by the results obtained, it seems easier to build a new culture from scratch than to remould it.

Briefly, though it is difficult to disentangle the relative weight of the different factors that contributed to the velocity of change, it seems likely that the use of group reshuffling and merger weakens the cultural fabric and thus facilitates the introduction of new shared practices.

These facts raise the question whether the debilitation of an organisational culture could be used as a purposive mean when management determines the need to transform a given set of common understandings. In other words, could management use some of the means employed by the administrators of FeMeSA (without being aware of the full range of their consequences) to accelerate the cultural transformation of an organisation or of some specific part of it?

There are several issues closely linked to the reshuffling and merger of groups as a cultural instrument. Assuming a previous diagnosis that recommends the removal of certain dysfunctional cultural elements, it has to be evaluated if such a group reshuffling is feasible from both a technical and social perspective. Concerning the former, it is necessary to evaluate if some knowledge – holder can be transferred without jeopardising output. From a social point of view it is necessary to weight the advantages of such a relocation against some eventual losses caused by the disruption of affective bindings. Equally important –at least in public environments- is whether such transfers among groups are legally possible. At Ferrocarriles (and other SOE's and public units as well) such transfers were hindered by existing regulations and highly dependent on the unions' will.

In summary, to merge and reshuffle groups as a means to accelerate the cultural transition seems to constitute a viable path, particularly in those situations in which actual and proposed model diverge radically and urgency plays a role. In any case, such a way of action can never be an end in itself. If explicitly implemented, it has to be enhanced by other measures that propose new orientations. The following lines will discuss the lessons that can be learned in that respect from the experiences here reviewed.

10.3.2 Publicness and transformation

Only as a consequence of the unavailability of government appropriations the units reflected the priorities and signals sent by the market. Real managerial latitude was only gained after the intricate legal webs were lifted and autonomy was only limited by common civil and commercial law. It is no longer necessary to take decisions that run counter to efficiency criteria since political influences have been practically eliminated. The breadth of impact of the companies' goals has been diminished; the "public good" (*bien público*) or "general interest" are no longer valid decisional criteria. It was possible to substitute the anachronic civil service merit system by principles of functional polyvalence; the myriad of public regulations by common private law.

On the basis of the evidence collected by this study, it seems clear that a requisite for the possibility to turn around the culture was the reduction in the degrees of publicness. The weakening of the previously existing practices facilitated the cultural turnaround; but only the reduction in the degrees of publicness allowed to substantially reorient the shared understandings. The extent to which the public character of these units has been shifted can be readily detected if one realises that the above-mentioned examples correspond to the "dual" factors mentioned in the introductory chapter. In summary, it is clear that only by stripping off the public character from the former state-owned-enterprise it was possible to achieve a cultural reorientation.

10.3.3 Leadership is the manipulation of culture

In sometimes even subtle ways, those who lead a company (or any relevant area of an organisation) modify its culture. The actions performed or examples provided by managers or other visible figures are perceived and evaluated by the members of all groups within the organisation. Once stabilised, their interpretations build those common understandings that in the end form a specific culture. Ferrocarriles' more recent history is illustrative in this respect, since it provides at least two clear examples of the close link between leadership and culture.

The first one, though substantiating the main argument, is a "negative" example: lack of leadership is followed by the loss of culture. Such a process was readily observable if the consequences of the main features of Ferrocarriles' management are reviewed. The latter's transitional character left the company (leaving aside the years of de Marchi's autocratic rule) without long-term objectives and a clear message that permeated the whole unit.

For a long time, this void was filled by the orientations provided by the unions. They represented not only the employees' interests but also continuity, and for both reasons most of Ferrocarriles' agents tended to side with them. Views and attitudes provided by, particularly,

the member-strong Unión Ferroviaria and the more radical La Fraternidad, fostered dysfunctional practices. The power of Ferrocarriles' unions was uncontested, even during times of authoritarian rule, when union activities were severely restricted. As mentioned by Tesoro (1996) "before 1989 the unions – and not management – dictated the organisational discourse".

The facts hitherto discussed indicate that the cultural void left by those at the top was filled by the unions. This process certainly did not happen overnight but was a consequence of both management's negligence or ineptitude and the unions interest to conquer additional power. There is agreement among most of Ferrocarriles' analysts about the power held by the employees' representatives before privatisation started. However, the most clear indicator of the genuine monopoly the unions had on cultural matters is offered by the fact that once their power started to erode, no other cultural currents gained significant consistency.

In summary: in the years between Ferrocarriles' creation and the mid 70's, leadership shifted away from management into the hands of the unions and their leaders. This process peaked in 1973 – 76, when Raúl Melgarejo, a union activist, was installed as FA's president. During the de – facto government 1976 – 1983, activism was forbidden, and the unions severely debilitated. After democracy was reinstalled in 1983, and until Ferrocarriles dissolution, their power remained weak. Be it as a consequence of the personal losses suffered under military rule, or the fact that (national) elections were not won by their natural allies (i.e., the Peronist party), the unions were not able to re-assume the leadership within Ferrocarriles. It is interesting to note that, as mentioned before, the void left (this time by the unions) was not regained by management. The railway company's last ten years were characterised by the complete absence of any visible leaders, be they official or countercultural ones. This lack probably was a the root of the immense and increasing operational losses and started to debilitate the until then prevalent common understandings.

The previous paragraphs allow to infer that if a strong counterculture is present, it will appropriate the roles that management is not able to assume. As evidenced by this "negative" example, if leadership is only provided in some sectors or not at all, no set of common understandings is present and visible, and the cultural fabric starts to erode and weaken. This study, nevertheless, also presented two "positive" examples, i.e., situations in which the actions of managers of TBA and NCA fostered certain attitudes among the employees. In addition, the disparate paths followed by both companies allowed to draw interesting comparisons and to infer about the advantages and drawbacks of each of them.

Expressed succinctly, it seems that TBA reached a similar cultural transformation in a fourth of the time needed by NCA through a different staffing policy, the believe in the advantages of MBWA and a more active involvement of management in the daily activities of the individual employees. Though sharing an even more competitive set of common understandings, NCA's management modified far less, probably a consequence of the incorporation of complete gangs and groups and its relative isolation.

10.4 Effective turnaround leadership: enabling factors

These differences notwithstanding, both private units shared a number of traits. To some extent they staffed their ranks from the same source, use similar technologies, and have to do business under a comparable legal framework. Of importance however was the fact that management at TBA and NCA, though aware of the concept of organisational culture, never acted in a intentional or purposive manner regarding cultural issues. In spite of this, both companies have done reasonably well in turning around the practices prevalent under public ownership. This section will highlight those factors that were conducive to an effective change of the inherited attitudes and to the formation of a rather homogeneous set of practices.

10.4.1 A single discourse

The prime reason for the success of the cultural turnaround was the existence, in each company, of a single message (or “speech”, in the words of our interviewees), shared unquestioned by all higher management. The low degrees of dispersion within upper hierarchical levels allow no misinterpretation. In addition, the relevance of sharing a sole message is also evidenced (and statistically supported) by the fact that in precisely those issues deemed as of relevance by management, the degrees of dispersion in most sub-units are low, and the changes in attitude significant.

In other words, in those areas in which management confronts the company’s staff with a shared vision, attitudes will most likely be affected in the proposed direction and intensity.

10.4.2 Words and deeds

Also of relevance for the success of the turnaround was that in both companies, but particularly at TBA, the “speech” were not just hollow phrases but words accompanied by deeds. Frequently mentioned by the employees in that respect were the implementation of customer centres, the thorough selection procedures (in the case of TBA), the behaviours that were punished, or the fact that managers lived by their words and did not hesitate to work at the front line in cases of emergency. In short, management transformed visions into practices because they simply “walk the talk” (Vance, 1998: 8).

10.4.3 Feedback

A third element that contributed to the significant attitudinal changes was the feedback obtained by all levels through the wide diffusion of a limited number of clear and easy to understand performance indicators. Admittedly, the strong impact of such indicators was in part due to the lack of their use by the previous, public managers. Their importance however cannot be overestimated since the latter is the case in many SOE’s in the underdeveloped world and because of the positive reinforcement such indicators create.

10.4.4 Win / win situation

Though highly relevant for the two cases here under scrutiny, the contribution towards an effective change of the three elements hitherto discussed do not constitute a novelty. A further element that contributed to reshape the culture was the employees' awareness that they were acting in a "win / win situation". This kind of awareness, generated and frequently highlighted by members of the upper echelons, intended to make employees realise that a) there is no way back to the old traditions and b) those who do not accept the "new ways" will have to leave. Particularly at the Personnel department officials were very outspoken about these facts; prospective or current employees that complained about tight working schedules, too much pressure or low wages received a short and blunt "There's a long queue [waiting for your job] behind you" as an answer.

10.4.5 Environmental issues and Unionism

Another relevant factor that shaped the attitude towards change of the former public employees was the general mood about deregulation processes. At least bits of information about these global tendencies reached everyone – giving deeper hold to the perception that their fate could not be warded off. Similar consequences had the firm actions that the Argentinean executive and legislative bodies were executing. Finally, the absence of strong union leadership also facilitated the cultural transformation. Even more, the little union activity registered was conducive to the management's aims.

10.5 New research directions

Any study that aims at uncovering cultural dynamics within organisations will necessarily come in contact with diverse academic fields. This project also followed a multidisciplinary approach; as a consequence, it also raises questions in different but related areas.

A first research issue which seems worth pursuing is mainly concerned with the forces that motivate employees, and specifically former public agents, to radically alter their views and understandings. It is noteworthy that even after long previous socialisation processes, they are able to modify their behaviour (e.g., vis-à-vis the customers) immediately, and their views (as demonstrated by the questionnaires and interviews) after only a very short time span. Is it possible that to some extent these shifts may be explained by the need to bring in line actual behaviour and beliefs? As noted before, such changes are partially supported by the lack of other professional alternatives (a saturated job market!), the latter fact inducing employees to accept very low wages.

The issue raised here follows the studies conducted by Festinger (1957), Brehm and Cohen (1962) and Bem (1967), and more recently reassumed by e.g., Gneezy and Rustichini (1998), and implies the need felt by each employee to bring into consonance his or her views with the behaviours they are following on a daily basis. Closer scrutiny of the conditions that force such a change may help to further accelerate such cultural transitions.

A second promising line of research is related to the "publicness puzzle". As mentioned while treating the methodological issues, this study tried to find an organisation that as a

consequence of deregulation would be as disparate as possible from the original public unit. The aim was to be able to detect and reveal a visible line of cleavage and large differences. However, as mentioned by Bozeman, research should not focus its attention exclusively on the binary (public – private) classification because of its limited utility for specific environments (1987: 110).

In a study about R & D laboratories Crow and Bozeman have developed dimensional measures of publicness and privateness (Crow and Bozeman, 1998; Bozeman 1987). The former is based on the percentage of the organisation's financial resources received from government sources and can be high (76 – 100 %), moderate (26 – 75 %) or low (0 – 25 %). This measure is taken as a proxy for political authority. The privateness measure is based on the "expressed market orientation" of the organisation, i.e., on the influence the market has on the development of products and services (Bozeman, 1987: 112). Though the use of other categories is feasible, this measure also shows three levels (high, moderate, low). Out of the combination of both measures a 3 by 3 typology emerges that covers a wide gamut of situations, from units that are mainly funded by government and rather isolated from market forces to completely independent and market oriented.

A research design like the one followed in this study could be applied in order to trace cultural shifts when units change their relative position between neighbouring cells in the aforementioned typology. Results from such a study could shed further light on the differences between governmental and public units and about the link between publicness and organisational effectiveness. And, needless to add, it would provide insights into more less radical but more common cultural transformations.

Finally, the impressive degree of anomia found at FeMeSA induced to take a systematic look at the degrees of dispersion within and among organisational subunits.

This approach proved to be useful, as it allowed to discriminate among different aggregation criteria. As mentioned before, it would be wrong to draw inferences about the cultural reality of any given organisation on the basis of an unsuitable aggregation criteria. It is important therefore to look for criteria that build culturally homogeneous subsamples and thus minimise overall dispersion. Further research is needed in order to determine whether this is a valid procedure to approach an organisational culture – at least in settings characterised by high levels of heterogeneity.

10.6 Summary

In summary, a first step towards an effective cultural reorientation is to evaluate the extent to which the degrees of publicness have been reduced. A thorough revision of the normative framework is needed in order to gauge the decisional latitude management counts with. Secondly, if a diagnosis reveals the existence of pervasive cultural traits that run counter to organisational needs or the orientations fostered by the upper levels, it could be of use to reshuffle groups within (or even among) certain areas in order to debilitate the prevalent cultural fabric. Though at a considerable personal toll, such a radical measure has proved to accelerate the ulterior formation of new shared understandings. Finally, the experience at NCA and particularly at TBA demonstrated that there is a wide array of actions that management could further use in order to redirect common views. The intrinsic advantages of

managing by wandering around, or of underpinning words with deeds have been largely confirmed. Next to this more common advice, insight has been gained about the advantage -in cultural terms- of putting through a consistent and uniformed discourse, limited to those few key points that need to be addressed immediately. Equally fruitful was the outspoken and frank communication among upper and lower echelons. Though sometimes even harsh, it allowed former public agents as well as “newcomers” to quickly understand the (new) rules of the game. One last element that also contributed greatly to redirect customs were the efforts conducted in order to make explicit to the employees that they were facing a so-called “win-win” situation. In short: on the basis of the experiences here reviewed, there is much the management of privatised companies can do to effectively reorient inherited dysfunctional practices.

Moreover, and beyond their direct managerial implications, the cases here reviewed advanced some material concerning the “publicness” debate referred to in chapter 1. As might be recalled, a number of voices question the validity of the public – private distinction and, by extension, also the existence of a “public organisational culture” as a distinctive phenomenon. The shifts operated through deregulation clearly indicate the influence of the so – called “dual” factors as elements that while defining the public character of a certain unit, foster specific cultural profiles. The emergence of the market as central institution and the simultaneous reorientation towards the customer and the unavailability of public subsidies and the concurrent shift towards efficiency: these are but two examples that reveal the close interaction between public traits and organisational culture.

In short, this study has forwarded strong evidence about the existence of these “dual” factors and their consequences upon the culture of an organisation. And thus, reasoning in an inductive manner, about the general legitimacy of the public – private distinction.

Appendix 1

Questionnaire (NCA)

Encuesta de Opinión

Nuevo Central Argentino

¿Por qué se hace esta encuesta?

El propósito es simple: la Universidad de Aquisgrán (Alemania) ha decidido estudiar las dificultades a las que se ven expuestos los miembros de organizaciones que transitan el camino de la privatización. Los resultados que se obtengan de esta encuesta servirán para conocer en forma más precisa la situación por la cual atraviesa la organización, desde el punto de vista de quienes trabajan en la misma.

Quienes propulsamos este estudio pretendemos, a partir del conocimiento adquirido a través de la presente encuesta, reducir las situaciones de conflicto generadas durante los procesos de privatización.

La participación en la encuesta es **voluntaria**: la decisión de llenar la encuesta queda en cada uno. Solo así podremos contar con respuestas espontáneas y sinceras.

La encuesta es **anónima**: no hay que firmar el formulario. La encuesta es procesada fuera de la empresa por investigadores de la Universidad de Aquisgrán, los cuales no poseen vínculo alguno con la Empresa.

Esperamos poder contar con la opinión y participación de todos Ustedes. Desde ya, muchas gracias por su apoyo.

Ricardo Recht
Director de Proyecto

Instrucciones generales:

La primera parte del formulario tiene por propósito conocer su opinión sobre ciertas prácticas de la empresa. Está armado de tal manera que Ud. siempre va a encontrar dos afirmaciones de sentido opuesto en los costados de la hoja y los números 1,2,3,4 y 5 entre las mismas. Veamos un ejemplo:

En donde yo trabajo...

| | | | | | | | |
|----|-----------------|---|---|---|---|---|---------------|
| 00 | siempre se fuma | 1 | 2 | 3 | 4 | 5 | nunca se fuma |
|----|-----------------|---|---|---|---|---|---------------|

Si efectivamente en donde Ud. trabaja siempre se fuma, por favor señale el número 1 marcando un círculo alrededor del mismo.

En donde yo trabajo...

| | | | | | | | |
|----|-----------------|---|---|---|---|---|---------------|
| 00 | siempre se fuma | 1 | 2 | 3 | 4 | 5 | nunca se fuma |
|----|-----------------|---|---|---|---|---|---------------|

Si, por el contrario, en donde Ud. trabaja no se fuma, marque por favor el número 5. Cuando en su opinión la verdad cae entremedio, marque el número 4 o 2, de acuerdo a cuán cerca la respuesta esté de uno de los extremos o el 3 si su opinión está justo en el medio.

Recuerde lo siguiente:

Lea con cuidado cada afirmación, frase o pregunta.

Por favor no deje ninguna pregunta sin responder.

Tenga presente que no hay respuestas buenas o malas, correctas o incorrectas.

Si se equivocó en un par, tache y marque de nuevo.

Ante cualquier duda, por favor pregunte al encuestador.

Prácticas de la Empresa

Esta parte del formulario tiene por propósito conocer su opinión sobre ciertas prácticas de la empresa. Por favor guíe sus respuestas en base a su experiencia diaria en la misma.

En donde yo trabajo...

| | | | | | | | |
|----|--|---|---|---|---|---|--|
| 01 | la mayor presión se ejerce para complacer los deseos de la clientela | 1 | 2 | 3 | 4 | 5 | la mayor presión se ejerce para cumplir en forma los procedimientos |
| 02 | se ejerce fuerte presión en llevar a cabo las tareas; a los problemas personales de los colegas se les da poca importancia | 1 | 2 | 3 | 4 | 5 | los problemas de los colegas siempre se tienen en cuenta; la tarea viene en segundo lugar |
| 03 | las personas no se sienten a gusto en situaciones desconocidas; tratan de arreglárselas evitando riesgos | 1 | 2 | 3 | 4 | 5 | las personas se sienten a gusto en situaciones desconocidas; no tiene dificultad en asumir riesgos |
| 04 | todas las decisiones de relevancia son tomadas por personas en forma individual | 1 | 2 | 3 | 4 | 5 | todas las decisiones de relevancia son tomada por grupos o comisiones |
| 05 | no pensamos más que en un día por adelantado | 1 | 2 | 3 | 4 | 5 | pensamos tres o más años por adelantado |
| 06 | la organización y sus miembros son abiertos y claros, tanto para los nuevos miembros como para terceros | 1 | 2 | 3 | 4 | 5 | la organización y las personas son cerradas y secretas, aún para los propios trabajadores |
| 07 | cada uno es muy consciente del costo del tiempo y de los materiales | 1 | 2 | 3 | 4 | 5 | nadie piensa en el costo del tiempo o de los materiales |
| 08 | las personas hacen el mínimo esfuerzo posible | 1 | 2 | 3 | 4 | 5 | cada uno da siempre lo mejor de sí mismo |

En donde yo trabajo...

| | | | | | | | |
|----|---|---|---|---|---|---|--|
| 09 | la vida privada de las personas es visto como una cosa ajena a la empresa | 1 | 2 | 3 | 4 | 5 | las normas de la organización atañen al comportamiento de los miembros tanto en el trabajo como en casa |
| 10 | la empresa se hace directamente responsable por el bienestar de los trabajadores y sus familias | 1 | 2 | 3 | 4 | 5 | a la empresa unicamente le interesa la tarea que el empleado lleva a cabo |
| 11 | hacemos muchos chistes sobre la organización y nuestra tarea | 1 | 2 | 3 | 4 | 5 | hablamos siempre en forma seria sobre la organización y nuestra tarea |
| 12 | cualquiera va bien con la organización | 1 | 2 | 3 | 4 | 5 | unicamente personas muy especiales van bien con la organización |
| 13 | las reuniones comienzan siempre puntualmente | 1 | 2 | 3 | 4 | 5 | las reuniones no comienzan siempre puntualmente |
| 14 | los trabajadores nuevos necesitan más de un año para sentirse como en casa | 1 | 2 | 3 | 4 | 5 | los trabajadores nuevos necesitan de un par de días para sentirse como en casa |
| 15 | los procedimientos son más importantes que los resultados | 1 | 2 | 3 | 4 | 5 | los resultados son más importantes que el observar el procedimiento correcto |
| 16 | la capacidad en la tarea es el único criterio empleado para la incorporación de personal; su procedencia no influye la decisión | 1 | 2 | 3 | 4 | 5 | las personas que provienen de determinada familia, clase social o escuela poseen mayores posibilidades de ser incorporadas |
| 17 | cumplimos con estrictas normas éticas y de honestidad, aún cuando vayan en detrimento de los resultados de corto plazo | 1 | 2 | 3 | 4 | 5 | en lo que se refiere a ética y honestidad, somos muy pragmáticos, no dogmáticos |
| 18 | cada día trae novedades | 1 | 2 | 3 | 4 | 5 | todos los días se parecen un poco |

Para completar nuestra información estadística necesitamos algunos datos adicionales:

19 Usted es...

1 Varón

2 Mujer

20 ¿Qué edad tiene Usted?

1 Menos de 20 años

2 de 20 a 24 años

3 de 25 a 29 años

4 de 30 a 34 años

5 de 35 a 39 años

6 de 40 a 49 años

7 de 50 a 59 años

8 60 años o más

21 ¿Cuántos años de estudios oficiales ha realizado?

(Comenzando por la escuela primaria, por favor cuente únicamente el número de años que abarca oficialmente cada curso, aún en el caso que Ud. hubiera necesitado más o menos cantidad de años; si ha participado en cursos a tiempo parcial o vespertinos, cuente el número de años que hubiera abarcado el mismo curso a tiempo completo.)

_____ años

22 ¿Qué clase de tarea realiza Usted en el NCA?

1 Un trabajo para el cual no se requiere normalmente más formación profesional que la capacitación en el empleo (trabajo no-calificado o semi-calificado).

2 Un trabajo para el cual no se requiere normalmente de una formación profesional superior (oficinista, mecanógrafo, secretario, administrativo, etc.).

3 Un trabajo para el cual se requieren normalmente hasta cuatro años de formación profesional (trabajador calificado, técnico, enfermera, etc.).

4 Un trabajo para el cual se requiere normalmente de una formación profesional universitaria (contador, abogado, ingeniero, psicólogo, etc.). En su actividad Usted no tiene a su cargo a otros empleados.

5 Un trabajo gerencial, por el cual tiene a su cargo uno o más subordinados de nivel no-gerencial.

6 Un trabajo gerencial, por el cual tiene a su cargo uno o más subordinados de nivel gerencial.

23 ¿Hace cuantos años que Usted trabaja para el NCA?
(Por favor indique en números la cantidad de años)

_____ años

24 Previo al ingreso al NCA, ¿qué experiencia laboral ha realizado?

- 1 ninguna experiencia, este es su primer empleo.
- 2 ha trabajado en Ferrocarriles Argentinos.
- 3 ha trabajado en otra empresa o ente del Estado
- 4 ha trabajado en relación de dependencia en el sector privado.
- 5 ha trabajado por cuenta propia.

Muchas gracias por su colaboración

Appendix 2

Dendrogram

Dendrogram

***** H I E R A R C H I C A L C L U S T E R A N A L Y S I S *****

Dendrogram using Average Linkage (Between Groups)

Rescaled Distance Cluster Combine

| C A S E | 0 | 5 | 10 | 15 | 20 | 25 |
|-----------|----------|---------|-----|-----|-----|-------|
| Label Num | + | + | + | + | + | + |
| 81 | -+ | | | | | |
| 84 | -+-----+ | | | | | |
| 82 | -+ | I | | | | |
| 83 | -+ | +-----+ | | | | |
| 80 | -+ | I | ++ | | | |
| 98 | -----+ | I I | | | | |
| 172 | -----+ | I | | | | |
| 137 | -----+ | | + | | | |
| 9 | -----+ | | I I | | | |
| 113 | -----+ | | ++ | ++ | | |
| 60 | -----+ | | I I | | | |
| 99 | -----+ | | | ++ | | |
| 100 | -----+ | | | I I | | |
| 3 | -----+ | | | ++ | | |
| 114 | -----+ | | | I I | | |
| 62 | -----+ | | | I I | | |
| 96 | -----+ | | | | I | |
| 6 | -----+ | | | | ++ | |
| 148 | -----+ | | | | I I | |
| 7 | -----+ | | | | I I | |
| 162 | -----+ | | | | I I | |
| 184 | -----+ | | | | | I |
| 157 | -----+ | | | | | I |
| 89 | -----+ | | | | | I |
| 149 | -----+ | ++ | | | | ++ |
| 150 | -----+ | | | | | I I |
| 151 | -----+ | | | | | I I |
| 24 | -----+ | | | | | I I I |
| 70 | -----+ | | | | | I I I |
| 152 | -----+ | | | | | I I I |
| 153 | -----+ | | | | | I I I |
| 147 | -----+ | | | | | I I I |
| 187 | -----+ | | | | | ++ I |
| 160 | -----+ | | | | | I I |
| 22 | -----+ | | | | | I I |
| 32 | -----+ | | | | | I I I |
| 110 | -----+ | | | | | I I I |
| 118 | -----+ | | | | | I I I |
| 181 | -----+ | | | | | ++ I |
| 91 | -----+ | | | | | I I |
| 161 | -----+ | | | | | I I |
| 38 | -----+ | | | | | I I I |

*** H I E R A R C H I C A L C L U S T E R A N A L Y S I S ***

| C A S E | 0 | 5 | 10 | 15 | 20 | 25 |
|---------|-----------------|---------------------------------|---------|--------|------------|----|
| Label | Num | +-----+-----+-----+-----+-----+ | | | | |
| 146 | -----+ | | +-----+ | ++ | I | |
| 120 | -----++ | I | I | I | I | |
| 156 | -----+ +----- | | I | I | I | |
| 58 | -----+ | | +----- | | I | |
| 48 | -----+----- | | I | | I | |
| 179 | -----+ +----- | | I | | I | |
| 87 | -----++ | | I I | | I | |
| 117 | -----+ | | ++ | | I | |
| 71 | -----+----- | | I | | I | |
| 185 | -----+ +----- | | | | I | |
| 164 | -----+ | | | | I | |
| 10 | -----+----- | | | | I | |
| 12 | -----+ | | +----- | | I | |
| 31 | -----+ +----- | | | | I | |
| 52 | -----+ +----- | | | | I | |
| 59 | -----+ +----- | | | I | I | |
| 25 | -----+ +----- | | | I | I | |
| 63 | -----+ +----- | | | I | I | |
| 65 | -----+ +----- | | | I | I | |
| 126 | -----+ I I | | +----- | I | I | |
| 14 | -----+ +----- | | | I | I I | |
| 51 | -----+ I I | | | I | I I | |
| 101 | -----+ +----- | | | I | I I | |
| 43 | -----+ +----- | | | I | I I | |
| 41 | -----+ +----- | | | +----- | I I | |
| 64 | -----+ +----- | | | I | I I | |
| 30 | -----+ I I | | | I | I I | |
| 74 | -----+ +----- | | | I | I I | |
| 169 | -----+ I +----- | | | | I I | |
| 73 | -----+ I | | | +----- | | |
| 174 | -----+ +----- | | | | I I | |
| 42 | -----+ +----- | | | | I I | |
| 167 | -----+ I | | | | I I | |
| 86 | -----+ +----- | | | +----- | I I | |
| 94 | -----+ +----- | | | | I I I | |
| 79 | -----+ +----- | | | | I I I | |
| 93 | -----+ I | | | | I I I | |
| 138 | -----+ +----- | | | | I I +----- | |
| 132 | -----+ +----- | | | | I I I | I |
| 135 | -----+ +----- | | | +----- | I I | |
| 37 | -----+ I | | | I | I I | |
| 39 | -----+ +----- | | | | I I I | |
| 97 | -----+ +----- | | | | I I I | |
| 18 | -----+ +----- | | | | I I I | |
| 77 | -----+ +----- | | | | I I I | |

***** H I E R A R C H I C A L C L U S T E R A N A L Y S I S * * *

| C A S E | 0 | 5 | 10 | 15 | 20 | 25 |
|---------|-----|---------------------------------|---------|---------|-----|----|
| Label | Num | +-----+-----+-----+-----+-----+ | | | | |
| 2 | | -----+----- | I | I | I | I |
| 50 | | -----+ | +-----+ | I | I | I |
| 122 | | -----+----- | I | I | I | I |
| 139 | | -----+ | I I | I | I | I |
| 21 | | -----+----- | ++ | I | I | I |
| 35 | | -----+ +----- | I | I | I | I |
| 36 | | -----+ +----- | | +----- | I | I |
| 20 | | -----+----- | | I | I | I |
| 76 | | -----+----- | | I | I | I |
| 180 | | -----+----- | I | I | I | I |
| 154 | | -----+----- | +-----+ | I | I | I |
| 155 | | -----+ +----- | I | I I | I | I |
| 106 | | -----+ +----- | | ++ | I | I |
| 85 | | -----+----- | | I | I | I |
| 186 | | -----+----- | | I | I | I |
| 129 | | -----+----- | | | I | I |
| 131 | | -----+----- | | | I | I |
| 140 | | -----+ +----- | | | I | I |
| 112 | | -----+----- | | +-----+ | I | I |
| 133 | | -----+----- | I | I | I | I |
| 104 | | -----+----- | | +-----+ | I | I |
| 16 | | -----+----- | | + I | I I | I |
| 68 | | -----+----- | | ++ | I I | I |
| 4 | | -----+----- | | | I I | I |
| 92 | | -----+----- | | | ++ | I |
| 67 | | -----+----- | | +----- | I | I |
| 176 | | -----+----- | | | I I | I |
| 11 | | -----+----- | | | I I | I |
| 125 | | -----+----- | | +----- | I I | I |
| 144 | | -----+----- | I | I | ++ | I |
| 191 | | -----+----- | | ++ | I I | I |
| 145 | | -----+----- | | | I I | I |
| 190 | | -----+----- | | | I I | I |
| 88 | | -----+----- | | | ++ | I |
| 121 | | -----+----- | | +----- | I | I |
| 143 | | -----+----- | | I I | | I |
| 189 | | -----+----- | | I I | | I |
| 34 | | -----+----- | | I I | | I |
| 182 | | -----+----- | | ++ ++ | | I |
| 28 | | -----+----- | I I I | | | I |
| 170 | | -----+ +----- | I I | | | I |
| 168 | | -----+----- | I I | | | I |
| 8 | | -----+----- | | ++ | | I |
| 29 | | -----+ +----- | I | | | I |
| 130 | | -----+----- | I I | | | I |

***** H I E R A R C H I C A L C L U S T E R A N A L Y S I S *****

| C A S E | 0 | 5 | 10 | 15 | 20 | 25 |
|---------|-----|---------------------------------|----|----|----|-----|
| Label | Num | +-----+-----+-----+-----+-----+ | | | | |
| | 5 | -----+-----+ I | | | | I |
| | 66 | -----+-----+ + | | | | I |
| | 33 | -----+-----+ I | | | | I |
| | 178 | -----+ +-----+ I | | | | I |
| | 115 | -----+ +-----+ I | | | | I |
| | 134 | -----+ I I I | | | | I |
| | 159 | -----+ +-----+ I I | | | | I |
| | 188 | -----+ I I | | | | I |
| | 46 | -----+ I I | | | | I |
| | 75 | -----+ +-----+ + | | | | I |
| | 15 | -----+ I I I | | | | + + |
| | 173 | -----+ +-----+ I | | | | I I |
| | 177 | -----+ I I I | | | | I I |
| | 108 | -----+ I I | | | | I I |
| | 127 | -----+ +-----+ + | | | | I I |
| | 183 | -----+ +-----+ I | | | | I I |
| | 119 | -----+ +-----+ I | | | | I I |
| | 165 | -----+ I I | | | | I I |
| | 175 | -----+ +-----+ + | | | | I I |
| | 78 | -----+ +-----+ I | | | | I I |
| | 141 | -----+ +-----+ I | | | | I I |
| | 142 | -----+ +-----+ + | | | | I I |
| | 105 | -----+ +-----+ + | | | | I I |
| | 95 | -----+ +-----+ + | | | | I I |
| | 158 | -----+ +-----+ + | | | | I I |
| | 69 | -----+ +-----+ + | | | | I I |
| | 107 | -----+ +-----+ I I | | | | I I |
| | 123 | -----+ +-----+ +-----+ I | | | | I |
| | 103 | -----+ +-----+ I I | | | | I I |
| | 47 | -----+ +-----+ I I | | | | I I |
| | 57 | -----+ +-----+ I I | | | | I I |
| | 49 | -----+ +-----+ I I | | | | I I |
| | 109 | -----+ +-----+ I I | | | | I I |
| | 19 | -----+ +-----+ I I | | | | I I |
| | 72 | -----+ +-----+ I | | | | I |
| | 1 | -----+ +-----+ I | | | | I |
| | 90 | -----+ +-----+ I | | | | I |
| | 13 | -----+ +-----+ I | | | | I |
| | 26 | -----+ +-----+ I | | | | I |
| | 45 | -----+ +-----+ I I | | | | I |
| | 54 | -----+ +-----+ +-----+ + | | | | + + |
| | 111 | -----+ +-----+ I +-----+ + | | | | + + |
| | 136 | -----+ +-----+ I I | | | | I I |
| | 27 | -----+ +-----+ I | | | | I |
| | 128 | -----+ +-----+ I I | | | | I I |

***** H I E R A R C H I C A L C L U S T E R A N A L Y S I S *****

| CASE | 0 | 5 | 10 | 15 | 20 | 25 |
|-------|-----|---------------------------------|----|----|-----------|----|
| Label | Num | +-----+-----+-----+-----+-----+ | | | | |
| 44 | | -----+-----+ | | | I I | |
| 124 | | -----+ +-----+ | | | I I | |
| 53 | | -----+ +-----+ | | | I +-----+ | |
| 163 | | -----+ +-----+ | | | I I | |
| 171 | | -----+ +-----+ | | | I I | |
| 55 | | -----+ +-----+ | | | I I | |
| 56 | | -----+ +-----+ | | | I I | |
| 17 | | -----+ +-----+ | | | I I | |
| 23 | | -----+ I +-----+ | | | I | |
| 116 | | -----+ I +-----+ | | | I | |
| 40 | | -----+ +-----+ | | | I | |
| 102 | | -----+ +-----+ | | | I | |
| 166 | | -----+ +-----+ | | | I | |
| 61 | | -----+ +-----+ | | | I | |

References

- Aharoni, Y. (1986) "The Evolution and Management of State Owned Enterprises" Ballinger Publishing Co., Cambridge, Massachusetts
- Alvesson, M. (1993) "Cultural-Ideological Modes of Management Control" in Deetz, S.: *Communication Yearbook*, SAGE, Beverly Hills, California
- Alvesson, M.; Berg, P.O. (1992) "Corporate Culture and Organisational Symbolism – An overview" Walter de Gruyter, Berlin – New York
- Allaire, Y.; Firsirotu, M.E. (1984) "Theories of Organisational Culture" *Organisation Studies*, Vol. 5, No. 4, (193 – 226)
- Allen, M. (1999) "Modernising Unions", paper presented at the "Unions 21" seminar of the Centre for Strategic Trade Union Management, Cranfield School of Management, Cranfield University
- Allison, G.T. (1983) "Public and Private Management: Are they fundamentally alike in all unimportant respects?" In J.L. Perry & K.L. Kraemer (Eds.): *Public Management* (72 – 93). Mayfield, Palo Alto, California
- Atkinson, S.E.; Halvorsen, R. (1986) "The relative efficiency of public and private firms in a regulated environment: The case of U.S. electric utilities" *Journal of Public Economics*, No. 29, (281 – 294)
- Baburoglu, O.; Gocer, A. (1991) "The Impact of Privatisation on the Organisational Culture: The Sumerbank's Case" Paper presented at the 8th. International SCOS Conference, Copenhagen, June 26-28
- Baumgartner, J.P. (1993) "Privatisation of Railways" in Report of the ninetieth Round Table of Transport Economics (February 4-5) European Conference of Ministers of Transport (ECMT / OECD), Paris
- Baumol, W.; Panzar, J.; Willig, R. (1982) "Contestable Markets and the Theory of Industry Structure" Harcourt Brace Jovanovich, New York
- Beckhard R.; Harris R. (1987) "Organisational transitions" (2nd. edition) Addison-Wesley, Reading, Massachusetts
- Beer, M. (1985) "The critical Path for Change: Keys to Success and failure in Six Companies" in Kilmann, R.H.; Covin, T.J., *Corporate Transformation*, Jossey-Bass, San Francisco
- Belgard, W.P.; Fisher, K.K.; Rayner, S.R. (1985) "Vision, Opportunity, and Tenacity: Three Informal Processes that Influence Formal Transformation" in Kilmann, R.H.; Covin, T.J., *Corporate Transformation*, Jossey-Bass, San Francisco
- Bem, D. J. (1967) "Self-perception: an alternative interpretation of cognitive dissonance phenomena" *Psychological Review* No. 3 (183 – 200)
- Bennis, W.G. (1969) "Organisation Development: Its Nature, Origins, and Prospects" Addison-Wesley Publ., Reading, Massachusetts
- Beres, M.E.; Musser, S.J. (1985) "Avenues and Impediments to Transformation: Lessons from a Case of Bottom-Up Change" in Kilmann, R.H.; Covin, T.J., *Corporate Transformation*, Jossey-Bass, San Francisco
- Blake, R.R.; Mouton, J.S. (1964) "The Managerial Grid" Gulf Publishing Co., Houston, Texas
- Blumenthal, J.M. (1983) "Candid reflections of a businessman in Washington" In J.L. Perry & K.L. Kraemer (Eds.), *Public Management* (22 – 33). Mayfield, Palo Alto, California

- Bös, D. (1991) "Privatisation: A theoretical treatment" Oxford University Press, Oxford
- Botti, H.; Pipan, T. (1991) "Civil servant, Service idea?" paper presented at the 8th. International SCOS Conference, Copenhagen, June 26-28
- Bozeman, B. (1987) "All Organisations are Public: Bridging Public and Private Organisational Theories" Jossey-Bass, San Francisco
- Bozeman, B.; Straussman, J.D. (1990) "Public Management Strategies: Guidelines for Managerial Effectiveness" Jossey-Bass, San Francisco
- Brehm, J.W.; Cohen, A.R. (1962) "Explorations in cognitive dissonance" Wiley, New York
- Brooke Tunstall, W. (1985) "Breakup of the Bell System: A Case Study in Cultural Transformation" in Kilmann, R.H.; Saxton, M.J.; Serpa, R.: *Gaining Control of the Corporate Culture*, Jossey-Bass Publ., San Francisco
- Bryson, J.M. (1988) "Strategic Planning for public and nonprofit organisations" Jossey Bass, San Francisco
- Buchanan, D.; Huczynski, A. (1997) "Organisational Behaviour", 3rd. edition, Prentice Hall, London
- Buono, A.F.; Bowditch, J.L. (1989) "The Human Side of Mergers and Acquisitions: Managing Collisions Between People, Cultures, and Organisations" Jossey-Bass, San Francisco
- Caiden, G. (1971) "What really is Public Maladministration?" *Public Administration Review*, Vol. 51, No. 6 (486 – 493)
- Campbell, D.T.; Stanley, J.C. (1963) "Experimental and quasi-experimental designs for research" Rand McNally, Chicago
- CICAP (1985) "La eficiencia en las empresas públicas" IDEA / OEA, Buenos Aires
- CNRT (1995) "Informe Estadístico Anual" Comisión Nacional de Regulación del Transporte, Buenos Aires
- CNRT (1996) "Informe Estadístico Anual" Comisión Nacional de Regulación del Transporte, Buenos Aires
- CNRT (1997) "Informe Estadístico Anual" Comisión Nacional de Regulación del Transporte, Buenos Aires
- Corradetti, S. (1999) "The impact of the privatisation of public sector enterprises on labour relations and conditions of work and employment in the air and land (rail) transport sector" Discussion Paper No. 2, International Labour Office, Geneva
- Crandall, R.; Ellig, J. (1997) "Economic Deregulation and Customer Choice: Lesson for the Electric Industry" Center for Market Processes, Fairfax, Virginia
- Crow, M.; Bozeman, B. (1998) "Limited by Design: R & D Laboratories in the U.S. National Innovation System" Columbia University Press, New York
- Cuccorese, H.J. (1984) "Historia de los Ferrocarriles en la Argentina" Ediciones Macchi, Buenos Aires
- Dahl, R.A.; Lindblom, C.E. (1953) "Politics, economics, and welfare" Harper and Brothers, New York
- Davis, S.M. (1985) "Managing Corporate Culture" Ballinger Publ., Cambridge, Massachusetts
- Davis, T.R.V. (1985) "Managing Cultures at the Bottom" in Kilmann, R.H.; Saxton, M.J.; Serpa, R.: *Gaining Control of the Corporate Culture*, Jossey-Bass Publ., San Francisco

- de Waele, A. (1993) "Introduction" in Report of the ninetieth Round Table of Transport Economics (February 4-5) European Conference of Ministers of Transport (ECMT / OECD), Paris
- Deal, T. E.; Kennedy, A.A. (1982) "Corporate Cultures: The Rites and Rituals of Corporate Life" Addison-Wesley, Reading, Massachusetts
- Deetz, S. (1985) "Ethical Considerations in Cultural Research" in Frost P.J. et al. (Eds.): *Organisational Culture*, SAGE, Beverly Hills
- Demsetz, H. (1968) "Why regulate utilities" *Journal of Law and Economics*, April issue
- Diehl, J.M.; Kohr, H.U. (1993) "Deskriptive Statistik" D.Klotz Verlag, Eschborn / Frankfurt M.
- Dirmoser, D. (1993) "Editorial" in Diermoser et al. (Eds.) *Markt in den Köpfen, Lateinamerika: Analysen und Berichte*, Nr. 17, Horlemann, Bad Honnef (7 – 14)
- Emmert, M.A.; Crow, M.M. (1988) "Public, private, and hybrid organisations: An empirical examination of the role of publicness" *Administration and Society*, Nr. 20, (2116 – 244)
- Felcman, I.L.; Krieger, M.J. (1987) "Pautas para la Transformación de la Administración Pública Argentina" *Administración de Empresas*, Tomo XIII, (307 – 326)
- Felder, R. (1994) "El estado se baja del tren: la política ferroviaria del gobierno menemista" *Revista de Economía, IADE*, pp. 53 – 77
- Ferrocarriles (1990) "Opciones de Reestructuración Estratégica para Ferrocarriles Argentinos. Informe final para el Ministerio de Obras y Servicios Públicos" Enero 1990
- Festinger, L. (1957) "A Theory of Cognitive Dissonance" Stanford University Press, Stanford, California
- FIEL (1989) "Los costos del Estado Regulador" Ediciones Manantial, Buenos Aires
- FIEL (1993) "Capital de Infraestructura en la Argentina: Gestión Pública, Privatización y Productividad" Fundación de Investigaciones Económicas Latinoamericanas, Buenos Aires
- Finney, M.; Bowen, D.E.; Pearson, C.; Siehl, C. (1985) "Designing Blueprints for Organisationwide Transformation" in Kilmann, R.H.; Covin, T.J., *Corporate Transformation*, Jossey-Bass, San Francisco
- Foster, C.D. (1992) "Privatisation, Public Ownership and the Deregulation of Natural Monopoly" Blackwell, Cambridge, Massachusetts
- Fruytier, B. (1994) "Organisational Change and the 'Münchhausen Problem': A Systems Theory Analysis of the Transition from a Taylorist Production Concept to the New Production, Concept" Eburon, Delft
- Galeazzi, P.A. (1996) "Privatizaciones Ferroviarias: Una Revisión de sus consecuencias" Editorial Medrano, Buenos Aires
- Gneezy, U.; Rustichini, A. (1998) "Pay Enough – Or Don't Pay At All" WP CentER for Economic Research, Tilburg University
- Golombiewski, R.T. (1987) "Public sector management today: Advanced differentiation and early institutionalisation" *Yearly Review of Management of the Journal of Management*, No. 13, (323 – 338)
- Gordon, G.G. (1985) "The Relationship of Corporate Culture to Industry Sector and Corporate Performance" in Kilmann, R.H.; Saxton, M.J.; Serpa, R.: *Gaining Control of the Corporate Culture*, Jossey-Bass Publ., San Francisco

- Hanke, S.H. (1987) "Prospects for Privatisation" *Proceedings of the Academy of Political Science*, Vol. 36, No. 3
- Harberger, (1987) "Growth of the Public Sector in our Times" Inaugural address, 5ª. Convención de Bancos Privados Nacionales, (Agosto 24 – 26), Buenos Aires
- Harrison (1998) "Police Organisational Culture: Using Ingrained Values to Build Positive Organisational Improvement" *Public Administration and Management: An Interactive Journal*, Vol. 3, No. 2 (1 – 14)
- Hickok (1998) "Downsizing and Organisational Culture" *Public Administration and Management: An Interactive Journal*, Vol. 3, No. 3 (1 – 14)
- Hoaglin D.C., Moosteller, F., Tukey J.W., (1983) "Understanding robust and exploratory data analysis" New York: Wiley & Sons
- Hofstede, G. (1980) "Culture's Consequences: International Differences in Work Related Values" SAGE, Beverly Hills, California
- Hofstede, G. (1991) "Cultures and Organisations: Software of the mind" McGraw-Hill, London
- Hofstede, G. (1998) "Identifying organisational subcultures: An empirical approach" *Journal of Management Studies*, Vol. 35, No. 1, (1 – 12)
- Hofstede, G.; Neuijen, B.; Daval Ohayv, D.; Sanders, G. (1990) "Measuring organisational cultures: a qualitative and quantitative study across twenty cases" *Administrative Science Quarterly*, 35, (286 – 316)
- ILO (1994) "Consequences for Management and Personnel of the Restructuring of Railways" International Labour Office, Geneva
- INDEC (1991) "Censo Nacional de Población" Instituto Nacional de Estadística y Censo, Buenos Aires
- Kahle, E. (1988) "Unternehmensführung und Unternehmenskultur: Zur Bedeutung der Unternehmensidentität als Erfolgsfaktor" *Zeitschrift für Betriebswirtschaft*, Vol. 58, No. 11 (1228 – 1241)
- Kahn, A.E. (1971) "The Economics of Regulation – Principles and Institutions" Vol.2, New York
- Kaschube, J. (1993) "Betrachtungen der Unternehmens- und Organisationskulturforschung aus (organisations-) psychologischer Sicht" in Dierkes, M.; von Rosenstiel, L.; Steger, U. (Eds.) *Unternehmenskultur in Theorie und Praxis*, Campus Verlag, Frankfurt
- Kern, H.; Schumann, M. (1984) "Das Ende der Arbeitsteilung? Rationalisierung in der industriellen Produktion" C.H. Beck, München
- Kerns, K.D.; Smith, P.J.; Mc Coy, C.E.; Orasanu, J. (1997) "Ergonomic issues in Air Traffic Management" in Karwowski, W.; Marras, W. (Eds.): *The Industrial Ergonomics Handbook*, CRC Press, Boca Raton, FL
- Kilmann, R.H.; Covin, T.J. (1988) "Corporate Transformation Revitalising Organisations for a Competitive World" Jossey-Bass, San Francisco
- Kilmann, R.H.; Saxton, M.J.; Serpa, R. (1985) "Gaining Control of the Corporate Culture" Jossey-Bass Publ., San Francisco
- Knechtel, K. (1993) "Die Privatisierung der argentinischen Eisenbahnen" *Internationales Verkehrswesen*, Vol. 45, No. 9, (483 – 492)

- Knutton, M. (1994) "Who serves the public best?" *International Railway Journal*, March issue
- Kogan, J.H. (1995a) "Latin America Leads the way" *International Railway Journal*, May issue
- Kogan, J.H. (1995b) "Argentina: New Challenges lie ahead" *International Railway Journal*, May issue
- Kogan, J.H.; Kohon, J.C. (1994) "Privatizaciones ferroviarias en Argentina: el caso de los servicios de pasajeros de la región metropolitana de Buenos Aires" paper presented at the XIX Congreso Panamericano de Ferrocarriles, Buenos Aires, January 1994
- Kohon, J.C. (1992) "Privatización de los ferrocarriles suburbanos de la región metropolitana de Buenos Aires: oferentes, usuarios, subsidios" paper presented at the VI Congreso latinoamericano de transporte público, Costa Rica, June 1992
- Laurila, J. (1997) "Discontinuous Technological Change as a Trigger for Temporary Reconciliation of Managerial Subcultures: A Case Study of a Finnish Paper Industry Company" in Sackmann, S.A. (Ed.) *Cultural Complexity in Organisations: Inherent Contrasts and Contradictions*, SAGE, Thousand Oaks, California
- Lawler, E.E. (1971) "Pay and organisational effectiveness: A psychological view" McGraw-Hill, New York
- Lipsky, M. (1980) "Street – level Bureaucracy Dilemmas of the Individual in Public Services", Russel Sage Foundation, New York
- López (h.), M.J. "Historia de los Ferrocarriles de la Provincia de Buenos Aires 1857 – 1886" Lumiere, Buenos Aires
- Louis, M.R. (1985) "Sourcing Workplace Cultures: Why, When, and How" in Kilmann, R.H.; Saxton, M.J.; Serpa, R.: *Gaining Control of the Corporate Culture*, Jossey-Bass Publ., San Francisco
- Love, H.M.; Barrett, A.L.; Ozley, L.M. (1985) "The Transformation of National Steel Corporation" in Kilmann, R.H.; Covin, T.J., *Corporate Transformation*, Jossey-Bass, San Francisco
- Marks, M.L.; Mirvis, P. (1993) "Managing the Merger" Prentice Hall, New York
- Martin, H.J. (1985) "Managing Specialised Corporate Cultures" in Kilmann, R.H.; Saxton, M.J.; Serpa, R.: *Gaining Control of the Corporate Culture*, Jossey-Bass Publ., San Francisco
- Martin, J.; Siehl, C. (1983) "Organisational Culture and Counterculture: An Uneasy Symbiosis" *Organisational Dynamics*, Vol. 12, No. 2 Autumn issue (52 – 64)
- McCaffrey, R.L. (1994) "Nuevo Central Argentino: Early Misfortunes Hampers Start-Up" *Progressive Railroading*, February issue (65 – 66)
- Metcalfe, L.; Richards, S. (1990) "Improving Public Management" European Institute of Public Administration, SAGE, London
- Mill, J.S. (1848 / 1875) "Principals of Political Economy" London Editions
- MOSP 1995 "Antecedentes Institucionales" Ministerio de Obras y Servicios Públicos, Buenos Aires
- Mullins, L.J. (1996) "Management and Organisational Behaviour", 4th. edition, Pitman, London
- Neghandi, A.R.; Baliga, B.R. (1979) "Quest for Survival and Growth" Praeger, New York

Neuberger, O.; Kompa, A. (1991) "Wir, die Firma: Der Kult um die Unternehmenskultur" W. Heyne Verlag, München

Niskanen, W.A. (1980) "The Prospect for Liberal Democracy" in Buchanan, J.M.; Wagner, R.E. (Eds.): *Fiscal Responsibility in Constitutional Democracy*, Kluwer Academic Publishing (157 – 180), Dordrecht, The Netherlands

Nutt, P.C.; Backoff, R.W. (1992) "The Strategic Management of Public and Third Sector Organisations" Jossey-Bass, San Francisco

Osterloh, M. (1988) "Unternehmensethik und Unternehmenskultur" in Steinmann, R.; Löhr, S. (Eds.): *Unternehmensethik*, Poeschl, Stuttgart (143 – 161)

Ouchi, W.G. (1981) "Theory Z: How American Business can Meet the Japanese Challenge" Addison-Wesley, Reading, Massachusetts

Pawlas, A. (1991) "Welche Beiträge leistet Martin Luther zu einer Unternehmensethik?" *Zeitschrift für Betriebswirtschaft*, Vol. 61, No. 3 (379 – 398)

Perry, J.L.; Kraemer, K.L. (Eds.) (1983) "Public Management" Mayfield, Palo Alto, California

Peters, T.J.; Waterman, R.H. (1982) "In search of excellence: Lessons from America's Best Run Companies" Harper & Row, New York

Pettigrew, A.M. (1979) "On Studying Organisational Culture" *Administrative Science Quarterly* Vol. 24, No. 4 (570 – 581)

Pipan, M. (1994 a) "Privatisation – Argentine Style" *International Railway Journal*, January issue (15 – 17)

Pipan, M. (1994 b) "Argentine Suburban Lines are privatised" *International Railway Journal*, December issue (17 – 18)

PNUD (1988) "Argentina: Empresas Públicas del Sector Transporte" PNUD / Oficina Regional para América Central y el Caribe, Vol. I & II

Pommerehne, W.W. (1990) "Genügt bloßes Reprivatisieren?" in Aufderheide, D. (Ed.) *Deregulierung und Privatisierung*, Econ, Stuttgart

Rainey, H.G. (1989) "Public Management: Recent Research on the Political Context and Managerial Roles, Structures, and Behaviours" *Journal of Management*, Vol. 15, No. 2 (229 – 250)

Rainey, H.G.; Backoff, R.W.; Levine, C.L. (1976) "Comparing public and private organisations" *Public Administration Review*, Vol. 36, (233 – 246)

Ramanadham V.V. (Ed.) (1989) "Privatisation in developing countries" Routledge, London

Rausch, A. (1993a) "Monitoring and regulation aspects of privatisation in Argentina and Latin America" paper presented at the Interregional Task Force Meeting on monitoring and regulatory aspects of privatisation, Oxford, July 19 – 23

Rausch, A. (1993b) "State reform, liberalization and stabilization in Argentina: some preliminary notes on its industrial and employment implications and perspectives" paper presented at the International seminar on regional development in an era of transition, Sao Paulo, December 6 – 8

Renz, D.O. (1985) "The Transformation of a Public Sector Bureaucracy" in Kilmann, R.H.; Covin, T.J., *Corporate Transformation*, Jossey-Bass, San Francisco

- Robertson, T.S.; Ward, S.; Caldwell, W.M. (1982) "Deregulation: Surviving the Transition" *Harvard Business Review*, July – August issue (20 – 24)
- Roccatagliata, J. (1987) "Los Ferrocarriles en la Argentina: un enfoque geográfico" EUDEBA, Buenos Aires
- Rodríguez Pardina, M.; Helou, F. (1996) "Comparación de Marcos Regulatorios en Argentina" Working paper LA 1 IN – WB / Argentina, Buenos Aires
- Roitman, D.B.; Liker, J.K.; Roskies, E. (1985) "Birthing a Factory of the Future: When is 'All at Once' Too Much?" in Kilmann, R.H.; Covin, T.J., *Corporate Transformation*, Jossey-Bass, San Francisco
- Rowlinson, M.; Procter, S. (1999) "Organisational Culture and Business History" *Organisation Studies*, Vol. 20, No. 3, (369 – 396)
- Sackmann, S.A. (1991) "Cultural Knowledge in Organisations: Exploring the Collective Mind" SAGE, Newbury Park, California
- Sackmann, S.A. (Ed.) (1997) "Cultural Complexity in Organisations: Inherent Contrasts and Contradictions" SAGE, Thousand Oaks, California
- Schein, E.H. (1969) "Process Consultation: Its Role in Organisational Development" Addison-Wesley Publ., Reading, Massachusetts
- Schein, E.H. (1983) "The Role of the Founder in Creating Organisational Culture" *Organisational Dynamics*, Summer issue (13 – 28)
- Schein, E.H. (1985a) "Organisational Culture and Leadership" Jossey – Bass, San Francisco
- Schein, E.H. (1985b) "How Culture Forms, Develops, and Changes" in Kilmann, R.H.; Saxton, M.J.; Serpa, R.: *Gaining Control of the Corporate Culture*, Jossey-Bass Publ., San Francisco
- Sethia, N.K.; von Glinow, M.A. (1985) "Arriving at Four Cultures by Managing the Reward System" in Kilmann, R.H.; Saxton, M.J.; Serpa, R.: *Gaining Control of the Corporate Culture*, Jossey-Bass Publ., San Francisco
- Silverleaf, A. (1994) "Manpower aspects of restructuring railways in developing countries: a synthesis of six country case studies" International Labour Office, Geneva SAP 2.28/WP.48
- Smircich, L. (1983) "Concepts of Culture and Organisational Analysis" *Administrative Science Quarterly*, Vol. 28, No. 3 (339 – 358)
- Smith, A. (1776) "An Inquiry into the Nature and Causes of the Wealth of Nations" 1976 Oxford University Press Edition, Oxford
- Sorge, A.; Streeck, W. (1988) "Industrial Relations and Technical Change: The Case for an Extended Perspective" in Hyman, R.; Streeck, W. (Eds.): *New Technology and Industrial Relations*, Blackwell, Oxford
- Spelthahn, S. (1994) "Privatisierung natürlicher Monopole: Theorie und internationale Praxis am Beispiel Wasser und Abwasser" Gabler, Wiesbaden
- Spencer, H. (1884) "The Man 'versus' the State" Williams & Norgate, London
- Stigler, G. (1971) "The theory of economic regulation" *Bell Journal of Economics and Management Science*, No. 2 (3 – 21)

TBA (1995) "Informe sobre Remuneraciones" Departamento Recursos Humanos, TBA, Buenos Aires

Tesoro, J.L. (1993) "La frontera faltante entre el sector publico y la sociedad: un desafio para los "fronterizos" entre la alienacion, la demencia y la locura" paper presented at the Instituto Internacional de Ciencias Administrativas conference, Toluca, Mexico, June 27 – 30.

Tesoro, J.L. (1996) "Un análisis burocratológico de la Administración Pública" *Revista de Derecho Económico*, Vol.1, Nr. 7, 631 – 639.

Trice, H.M. (1993) "Occupational Subcultures in the Workplace" *Cornell Studies in Industrial and Labor Relations* No. 26, ILR Press, Ithaca, New York

Tsui, A.S.; Egan, T.D.; O'Reilly C.A. (1992) "Being Different: Relational Demography and Organisational Attachment" *Administrative Science Quarterly*, December issue

Turner, C.A. (1998) "Organisational Culture and Cost-Containment in Corrections: The Leadership Dimension" *Public Administration and Management: An Interactive Journal*, Vol. 3, No. 3

Valdés, J.G. (1993) "Die Chicago Schule; Operation Chile" in Diermoser et al. (Eds.) *Markt in den Köpfen, Lateinamerika: Analysen und Berichte*, Nr. 17, Horlemann, Bad Honnef, (36 – 60)

van Dijk, M.P.; Schulte Nordholt, N.G. (Eds.) (1994) "Privatisation experiences in African and Asian countries: An Economic and Political Analysis of Institutional Transformation" *SISWO Publication* No. 384, Amsterdam

van Maanen, H.; Barley, S. (1985) "Cultural Organisations: Fragments of a Theory" in P. J. Frost, P.J. et al. (Eds.) : *Organisational Culture* (31 – 54), SAGE, Newbury Park, California

Vance, N.R. (1998) "Systematically Describing an Organisation's Culture: A Case Study of the Pima County, Arizona, Pretrial Services Agency" *Public Administration and Management: An Interactive Journal*, Vol. 3, No. 3

von Rosenstiel, L.; Molt, W.; Rüttinger, B. (1985) "Organisationspsychologie" Kohlhammer, Stuttgart

von Rosenstiel, L. (1993) "Unternehmenskultur – einige einführende Anmerkungen" in Dierkes, M.; von Rosenstiel, L.; Steger, U. (Eds.) *Unternehmenskultur in Theorie und Praxis*, Campus Verlag, Frankfurt

Walter, J. (1994) "Ajuste, Flexibilidad Laboral y Nuevas Formas de Organización del Trabajo en las Empresas Argentinas" Serie "Debates", No. 2, CEIL, June issue

Wamsley, G.L; Zald, M.N. (1973) "The political economy of public organisations" Lexington, Lexington, Massachusetts

Weiß, J.M.; Wiest, A.J. (1991) "Unternehmenskultur in den neuen Bundesländern Deutschlands" *Zeitschrift Führung und Organisation*, Vol. 5, No. 5 (324 – 330)

Wickens, C.; Mavor, A.; McGee, J. (1997) "Flight to the Future: Human Factors in Air Traffic Control", National Academy Press, Washington, DC.

Yarrow, G. (1986) "Privatisation in Theory and Practice" *Economic Policy*, Vol. 2, April

Ybema, S.B. (1997) "Telling Tales: Contrast and Commonalities Within the Organisation of an Amusement Park – Confronting and Combining Different Perspectives" in Sackmann, S.A. (Ed.) "Cultural Complexity in Organisations: Inherent Contrasts and Contradictions" SAGE, Thousand Oaks, California

Samenvatting

Rond 1985 telde Ferrocarriles Argentinos, de Argentijnse nationale spoorwegmaatschappij, ongeveer 100.000 werknemers, vervoerde gemiddeld 22 miljard transport units en maakte een verlies van 2 miljoen dollar per dag. Tien jaar later, en na deregulering, werd op het Argentijnse spoorwegnet twee keer zoveel vervoerd met minder dan een derde van de werknemers en subsidies.

Dit kon worden bereikt door de introductie van nieuwe strategieën, productieprocessen en een nieuw intern beleid. Alhoewel het moeilijk te meten is, was de ommekeer in de houding van de werknemers die hun werk behielden en aan de slag konden bij de verschillende nieuwe spoorwegbedrijven ook een belangrijke factor.

Dit onderzoek illustreert deze ommekeer door aan te tonen hoe de organisatorische structuur van Ferrocarriles Argentinos (FA), een overheidsbedrijf, werd omgevormd door de opdeling van het bedrijf en de daaropvolgende privatisering. Deze case is een goed voorbeeld van hoe een zwakke en slecht functionerende cultuur zich heroriënteerde naar een klantgerichte en kostenreducerende cultuur.

De culturele aspecten van een dergelijke transformatie verdienen nader onderzoek vanwege het manifest gebrek aan literatuur hierover bij privatiseringen. Het is opmerkelijk dat terwijl de meerderheid van de literatuur over privatisering zich richtte op de strategische, financiële of de macro-economische gevolgen van deregulering, er maar weinig aandacht werd gegeven aan de “zachte” variabelen die betrokken zijn bij dergelijke processen. Het negeren van deze aspecten is verrassend, omdat er sinds 1980 wereldwijd heel wat neoliberaal beleid werd geïmplementeerd en ook gedurende deze periode het concept van organisatiecultuur een hot item was binnen de organisatie-theorie. Verder is het opmerkelijk omdat aan de basis van bestaand materiaal en al uitgevoerd onderzoek, het aannemelijk was om te concluderen dat een verandering in eigendom en marktvoorwaarden ten gevolge van privatisering, ook de cultuur en daardoor het resultaat aanzienlijk zouden beïnvloeden.

De privatisering van elk overheidsbedrijf verandert ingrijpend de marktsituatie, het juridisch kader waarin het bedrijf zich bevindt en, in het bijzonder, de financiële relatie met de overheid. Publieke eenheden die een dereguleringsproces hebben ondergaan werken (meestal) in een markt met volledige mededinging, verkrijgen leidinggevende speelruimte, moeten vechten voor klanten en hun eigen inkomsten genereren. Zulke veranderingen beïnvloeden de manier waarop een bedrijf werkt en vanzelfsprekend ook de cultuur die de organisatie heeft.

En precies dit was de centrale doelstelling van dit onderzoek: het kwantitatief meten van de richting en de grootte van de culturele verschuivingen die plaatsvonden na de privatisering. Met andere woorden, het was de bedoeling om de verschuivingen aan te tonen die plaatsvonden in de arbeidsverhoudingen, opvattingen en waarden van de werknemers die binnen de organisatie bleven, om verschuivingen aan te tonen die leidden tot een competitie-vriendelijke manier van denken, weg van diepgewortelde bureaucratische patronen.

Zulke bureaucratische patronen en hun culturele gevolgen worden beschreven in hoofdstuk 1, en geplaatst in het bredere kader van het heersende "publicness" debat. Aan de hand van het oorspronkelijke *werk* van Rainey, Backoff en Levine (1976) worden een gereduceerd aantal zogenaamde "dual factors" herkend. De rol van deze tweeledige factoren suggereert sterk om hun ontwikkeling gedurende het dereguleringsproces te evalueren om zo inzicht te krijgen in de culturele wijzigingen van een voormalig overheidsbedrijf naar een privébedrijf.

Voortgaand op het introducerend karakter van het eerste hoofdstuk, beschrijven de volgende drie hoofdstukken de belangrijkste concepten en de methodologie gebruikt in dit onderzoek. Na het illustreren van de veranderende houding tegenover publieke eigendom binnen het Argentijnse spoorwegbeleid, beschrijft hoofdstuk 2 de doelen, de perspectieven en de praktische alternatieven van elke privatisering. Hoofdstuk 3 poogt het concept "Organisatorische Cultuur" te definiëren en het te situeren ten aanzien van andere gerelateerde gebieden van de organisatietheorie en -praktijk. In het tweede deel van dit hoofdstuk worden de cultuur-gerelateerde concepten verduidelijkt die een relevante rol spelen in dit onderzoek. Na de geaccumuleerde wetenschappelijke kennis en de empirische bewijzen worden in hoofdstuk 4 een aantal hypotheses geformuleerd. In het tweede deel van dit hoofdstuk wat tegelijk een eerste theoretische module afsluit, wordt het toegepaste quasi-experimentele onderzoek kort besproken.

Het centrale deel van deze studie bestaat uit de volgende vier hoofdstukken. Elk hoofdstuk is gewijd aan een van de bedrijven dat toebehoorde aan (of deel uitmaakte van, in het geval van Ferrocarriles Argentinos) het Argentijnse nationale spoorwegsysteem. Na een grondige beschrijving van de specifieke institutionele ontwikkelingen, bekijkt elk hoofdstuk hoe deze ontwikkelingen een set van specifieke culturele praktijken tot stand brachten. Hoofdstuk 5 beschrijft gedetailleerd en chronologisch de problemen van Ferrocarriles Argentinos. Het volgende hoofdstuk is gewijd aan Ferrocarriles Metropolitanos (FeMeSA), een organisatie met een tijdelijk karakter, opgericht om als brug te functioneren tussen het verdwijnende FA en de start van de nieuwe gedereguleerde bedrijven. Ondanks het tijdelijk karakter van de bestudeerde organisatie, is hoofdstuk 6 niet alleen relevant vanwege het ex-ante onderzoek dat plaatsvond bij FeMeSA, maar ook omdat diepgaande veranderingen plaatsvonden op een moment van culturele anomie. Hoofdstuk 7 beschrijft het proces van culturele reconstructie van Trenes de Buenos Aires (TBA), de metropolitane vervoersmaatschappij. Hoofdstuk 8, het laatste hoofdstuk van het tweede deel, bespreekt het analoge proces van Nuevo Central Argentino (NCA), de cargo-maatschappij die diende als controle-onderzoekseenheid.

De vier eerder besproken hoofdstukken geven tot op zekere hoogte een weergave van de culturele dynamiek van het gehele proces. Hoofdstuk 9 gaat verder in op de geobserveerde algemene trends van (her-)creatie van culturele elementen onder de voormalige FA werknemers en hun nieuwe collega's. Tegelijkertijd wordt elke eerder opgestelde hypothese onderzocht teneinde de validiteit ervan vast te stellen. Tenslotte vat hoofdstuk 10 de belangrijkste bevindingen en de implicaties ervan voor de betrokken bedrijven samen.

De studie genereert zowel praktische als academische resultaten. Praktisch vormt de studie een interessant voorbeeld voor management van aan de gang zijnde of toekomstige privatiseringen. De inzichten uit dit onderzoek kunnen ook een toepassing vinden in organisaties die, alhoewel behorend tot de private sector, aanzienlijk gereguleerd zijn en zich

trachten te verlossen van de negatieve culturele neveneffecten van deze regulering. Tenslotte levert de gepresenteerde studie interessant materiaal op in verband met de culturele dynamiek van turbulente organisatorische omgevingen en voor het publiek-private debat. Verder worden een aantal zaken die relevant zijn voor zowel wetenschap als praktijk besproken. Het hoofdstuk eindigt met een aantal onderzoeksvragen die gezien de inhoud van deze studie interessant zijn voor verder onderzoek.

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Public units that have been through a deregulatory process operate in a new market, see their legal framework radically altered, have to fight for customers and to generate their own resources. Such changes affect the way a company operates and obviously also affect the culture an organisation has. This study illustrates how the organisational culture of Ferrocarriles Argentinos, an Argentinean state-owned-enterprise, was transformed as a consequence of the company's partitioning and subsequent transfer into private hands. The case provides a good example of how a weak and dysfunctional culture was re-oriented towards an emphasis on customers, cost-reduction and efficiency. It also provides an interesting example for the management of ongoing as well as future privatisation processes. The insights gained through this study could find application within organisations that, though belonging to the private sector, have been heavily regulated and are trying to get rid of the pernicious cultural by-products of this regulation.

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